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## A Cross-Cultural Comparison of Depressotypic Cognitions and Suitability for Cognitive Behavioral Therapy

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A CROSS-CULTURAL COMPARISON OF DEPRESSOTYPIC COGNITIONS AND  
SUITABILITY FOR COGNITIVE BEHAVIORAL THERAPY

by

Lydia Christine Jackson  
Bachelor of Science, Duke University, 1995  
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A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of


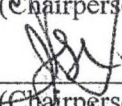
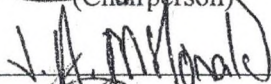
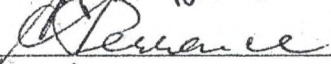
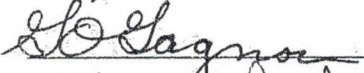
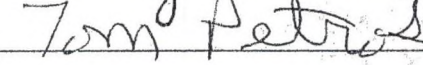
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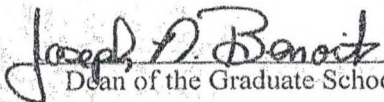


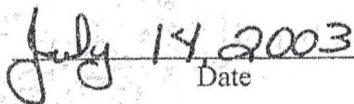
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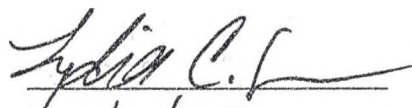
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## ABSTRACT

Although some researchers have suggested that cognitive behavioral therapy (CBT) might be an effective treatment paradigm for minority clients, there is little empirical evidence to support this claim. In addition, few studies have explored the cross-cultural expression of the maladaptive cognitions that CBT targets for change in the treatment of major depressive disorder. The purpose of the present study was twofold: (a) to compare the applicability of CBT approaches and assumptions in Caucasians and American Indians, and (b) to evaluate whether depressotypic cognitions found in the literature related to CBT are equally prevalent in both groups. In study one, an applicability scale for CBT (Cognitive Behavioral Applicability Scale; CBT-AS) was constructed to explore the first aim of the study. The standardization sample for the CBT-AS was composed of 222 undergraduates from the University of North Dakota. The extracted factor structure and reliability data of the CBT-AS provide preliminary evidence that the instrument is a conceptually meaningful and psychometrically sound measure. Three factor scales were derived: focused in-session behavior, active stance, and structured therapeutic relationship. In study two, the generalizability of depressotypic cognitions and CBT applicability between American Indians and Caucasians were compared. American Indian participants ( $n = 41$ ) were recruited from the Time-Out Wacipi Pow-Wow, whereas Caucasian participants ( $n = 41$ ) matched for age and gender were recruited from a community blues festival. Consistent with



expectations, a discriminant analysis procedure revealed significant differences between the two groups in terms of perceived CBT applicability. Caucasian participants rated a stronger preference for CBT's focused in-session behavior and structured therapeutic relationship than the American Indian participants. Both groups rated the active stance domain of CBT as mutually acceptable. In contrast, no significant differences were found between the groups in terms of depressotypic cognitions. Based upon the American Indians' preferences found in this study as well as the treatment literature, several modifications to CBT were proposed for future investigation.

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## CHAPTER I

### INTRODUCTION

This study sought to explore two issues that strongly influence the prevalence and treatment of depression with multicultural populations. Western concepts of psychotherapy often emphasize internal causality for events and stress taking personal responsibility for one's own life experiences (Jayakar, 1994). Therefore, certain therapeutic techniques may not be as effective with clients from other cultures whose worldview may differ. Understanding how to adapt therapy for persons of different sociocultural backgrounds will maximize treatment efficacy and enhance the psychological well being of those suffering from depression and other forms of psychopathology. The first aim of the present study was to explore ways to modify one such therapeutic approach, cognitive behavioral therapy (CBT), with American Indian individuals.

In addition, research is needed to explore how persons from diverse cultural backgrounds may differ in attributional and cognitive style. Many theories accounting for the etiology of major depressive disorder regard cognitive distortions and attributional biases as a core part of psychopathology. Differences in attributional style may help explain the manner in which the etiology and manifestation of major depressive disorder vary cross-culturally. Therefore, the second aim of the present study was to



explore whether certain cognitive biases implicated in depression are applicable in American Indian individuals.

This chapter will begin with an overview of the literature pertaining to cognition and depression. Second, cultural influences on cognitive processes implicated in depression will be presented, including a discussion of American Indian cultural values. Next, information regarding the administration, applicability and acceptability of CBT will be given. Finally, implications for the administration of CBT to culturally diverse individuals will be examined.

### Cognition and Depression

According to Young, Beck, and Weinberger (1993) depressed individuals usually view themselves as worthless, inadequate, unlovable, and deficient. Depressed individuals also see the environment as overwhelming, with obstacles of such magnitude that they cannot be overcome. Such an attitude may develop into a grim outlook on the future, sometimes leading to suicidal ideation and attempts. This depressotypic thinking style is manifested in patients through recurring cognitive distortions that emphasize negative interpretations. In this manner, patients are then maintaining their negative views and thereby perpetuating the disorder (Young et al., 1993). Two major theoretical paradigms explain this link between cognition and depression: Beck's cognitive distortion model and Seligman's attributional biases model.

#### *Beck's model*

According to Beck's (1987) cognitive distortion model, the thinking styles of depressed individuals suggest pervasive negativity in perceiving the world. First, they display a style that focuses predominantly on negative aspects of events, negating the

self-serving and often adaptive biases of normal individuals. Second, they demonstrate pervasive self-attribution for all problems in all situations. Third, depressed individuals engage in secondary elaboration, whereby they devalue their self-worth, adequacy, and lovability and then criticize themselves for falling short of their own standards. Fourth, they may overgeneralize, extrapolating errors or deficiencies to such an extent that they become relevant to the past, present, and future, and across all situations. Fifth, problem-solving abilities are reduced and replaced with a general sense of futility regarding difficulties.

Beck observed that these negative thinking patterns can be categorized into a negative cognitive triad, consisting of negative judgments regarding the self, circumstances, and future (Beck, 1967a). In addition, depressed individuals possess a negative cognitive schema, which Beck defined as a relatively stable knowledge structure that guides the processing of current incoming information. In depression, dysfunctional schemata related to self-concept and expectations are activated and produce systematic errors of thinking. For example, the dysfunctional schema "failure to achieve" is the belief that one will inevitably fail or that one is fundamentally inadequate. This particular dysfunctional schema often involves the belief that one is stupid, inept, untalented, or ignorant (Young et al., 1993). Distortions that arise from dysfunctional schemata produce and maintain the negative cognitive triad.

The cognitive theory of depression developed out of clinical observations that depressed individuals display negative automatic thoughts (Clark & Beck, 1999). An automatic thought is a negative self-statement elicited in specific situations and related to a change in affect. Negative automatic thoughts are usually transient, highly specific and



discrete, spontaneous and involuntary, plausible, consistent with the individual's current affective state or personality disposition, and a biased representation of reality including the self. In treatment for depression, the cognitive therapist uses strategies to teach patients how to engage in more adaptive modes of thinking in order to challenge and modify these negative automatic thoughts. The following vignette from Beck (1995; p. 78) illustrates the identification and challenging of a negative automatic thought:

Therapist: Now I'd like to spend a few minutes talking about the connection between thoughts and feelings. Can you think of some times this week when you felt upset?

Patient: Yeah. Walking to class this morning.

T: What emotion were you feeling: sad? anxious? angry?

P: Sad.

T: What was going through your mind?

P: I was looking at these other students, talking or playing Frisbee, hanging out on the lawn.

T: What was going through your mind when you saw them?

P: I'll never be like them.

T: Okay. You just identified what we call an automatic thought. Everyone has them. They're thoughts that just seem to pop in our heads. We're not deliberately trying to think about them; that's why we call them automatic. Most of the time, they're real quick and we're much more aware of the emotion-in this case, sadness-than we are of the thoughts. Lots of times the thoughts are distorted in some way. But we react as if they're true.

According to cognitive theory, humans are constantly evaluating and interpreting incoming information in their own environment. These cognitive appraisals or interpretations are subjective inasmuch as they are an attempt to impart some meaning or understanding in order to explain one's situation (Clark & Beck, 1999). Not only are these appraisals subjective, but at best they are an "approximate representation of experience." Furthermore, in highly affective states, cognitive biases or errors may become even more prominent. A number of cognitive biases are specifically implicated in depression, such as arbitrary inference, selective abstraction, overgeneralization, minimization, personalization, and dichotomous thinking. Beck (1987) described these biases as an inevitable outcome of selective focusing on the negative aspects and excluding the positive aspects of experience. Moreover, depressed individuals may attach meanings to the experience that are idiosyncratic and are discrepant with the types of meaning that would be attached by persons who are not depressed (e.g., "I'm slowed down; therefore, I'm worthless").

Yet another way of viewing this depressotypic cognitive style is in terms of a systematic bias that is evidenced by distorted cognitive processing. Beck (1987) provided an illustration of this phenomenon. His vignette depicted a depressed woman who attended a social function with her fiancée, where he spent time with the woman but also socialized with other guests. First the woman demonstrated selective abstraction by saying, "Jerry spent time with other guests." From this cognitive distortion, she arrived upon a biased interpretation, saying, "He cared more about them than about me." This led to her dichotomous thought of "He doesn't like me anymore." Then she displayed self-attribution in her statement "I must bore him." Her negative self-attribution was



magnified into an overgeneralization regarding her personality: "I am a boring person; nobody likes me." Finally, this led the woman to declare a negative prediction: "I will always be alone and unhappy." Beck emphasized how each conclusion forms the basic assumption for the next conclusion. He observed that the ultimate conclusion may reflect a core schema such as "I am unlovable" or "I am weak and helpless" that is activated during a period of moderate to severe depression.

This example illustrates how faulty cognitive processing not only feeds upon distorted cognitions, but how it also propagates further depressotypic thoughts. According to Beck's cognitive theory, such negative thinking patterns are responsible for the etiology and maintenance of major depression and should be the target of psychotherapeutic intervention. Although Beck's cognitive theory of depression grew out of his clinical observations, studies have demonstrated a relation between depressotypic automatic thoughts and clinical depression in psychiatric patients (e.g., Watkins & Rush, 1983; Burns, Shaw, & Croker, 1987).

#### *Seligman's model*

The second major theory of cognitive vulnerability to depression is the helplessness theory, later reformulated and termed the hopelessness theory. Martin Seligman proposed this theory based upon his observations that dogs that were unable to control negative stimuli usually developed behavior consistent with depression (Seligman, 1975). Specifically, in this experiment dogs that were unable to control electrical shocks to their feet eventually became helpless, so that in the future they did not escape aversive situations even when a pathway to escape became available.



His theory focused on how depression-prone individuals develop expectations that they are unable to control aversive outcomes and begin to behave in ways that are consistent with these expectations. Although research has supported the basic components of Seligman's learned helplessness model, other research has pointed to the theory's shortcomings. Therefore, Seligman and colleagues reformulated the theory to focus on an individual's attributions about the causes of events (Abramson, Seligman, & Teasdale, 1978). According to this theory, depression occurs when individuals infer there is nothing they can do to improve their situation. The type of inference, or attributional style, that a person adopts to explain the cause of negative life situations is what influences whether the person develops a depressive disorder (Abramson & Alloy, 1990).

Attributional style refers to people's tendency to infer various causal explanations across situations and time (Metalsky & Abramson, 1981). An attributional style for negative situations characterized as global, stable, and internal creates the greatest vulnerability for developing major depressive disorder (Seligman, Abramson, Semmel, & Von Baeyer, 1979). According to Seligman et al., this learned helplessness hypothesis of depression posits that the kinds of causal attributions people make to explain undesired, uncontrollable outcomes influence whether their current helpless state will lead to low self-esteem and whether it will generalize to other situations in the future. Specifically, this theory suggests that depressive symptoms follow from a belief that the causes of undesired events are located inside the self, (i.e., internal locus of causality), that they will persist over time (i.e., stable), and that the causes will generalize to other areas of life (i.e., global; Rush, 1987).

Studies have confirmed that when individuals are depressed, they make the kinds of attributions suggested by the theory (Ingram, Miranda, & Segal, 1998). Ingram et al. pointed out that data even suggest that the tendency to make these kinds of attributions precedes negative mood reactions by college students in response to negative events (see Metalsky, Halberstadt, & Abramson, 1987; Metalsky, Joiner, Hardin, & Abramson, 1993). In addition, studies examining the relation between attributional style and depression confirm the presence of some association between depression and the tendency to make internal, stable, and global attributions for negative events (e.g., Brewin, 1985). Furthermore, in their meta-analysis of 104 studies, Sweeney, Anderson, and Bailey (1986) found a significant relation between attributional style and depression, providing evidence for Seligman's model.

The models of cognition proposed by Beck and Seligman to account for the etiology and maintenance of major depression form the bedrock of cognitive-behavioral therapy, the current treatment of choice for depressive disorder (Craighead, Craighead, & Ilardi, 1998). Although studies have confirmed a relation between affective disorder and the presence of negative automatic thoughts and depressotypic attributions, the presence of schemata, which are the higher-order, underlying cognitive structures that organize and process incoming information, are at present merely hypothetical constructs that have yet to be empirically validated (Young, 1999). Nonetheless, Beck's negative cognitive triad and Seligman's depressotypic attributional style remain the dominant mechanisms by which Western psychologists explain the psychopathology of depression. It follows, then, that cross-cultural differences in attributional and cognitive style may result in cross-cultural differences in depression.



## Culture and Cognition

Epidemiological studies of depression suggest that the disorder is pervasive and universal, but the specific expression of symptomatology and prevalence rates vary cross-culturally (Marsella, Sartorius, Jablensky, & Fenton, 1985). Indeed, in some non-Western cultures depressotypic thinking styles are either not prominent or are absent in depression (Kleinman, 1980). Contrary to expectation, this lack of depressotypic cognition often accompanies other typical symptomatology consistent with major depression such as lethargy, sleep disturbance, and loss of interest in usual activities. Engel and DeRubeis (1993) noted a dearth of systematic studies that explore the incidence of such "cognitive-pathology-free" depressive episodes.

### *Culture and Beck's Model*

Very little is known about the cross-cultural validity of Beck's cognitive theory of depression. One study, however, examined the nature of automatic thoughts in American Indians. Kunde (1985) constructed a Native American version of the Automatic Thoughts Questionnaire (ATQ; Hollon & Kendall, 1980) by asking Native individuals to free-associate automatic thoughts related to depression. Termed the ATQ-NA, the measure was developed to assess specific negative thoughts depressed Natives may have, such as "My family would be better off without me", or "I wish this was a dream." Kunde developed the ATQ-NA in an attempt to: (a) determine the type and range of cognitions unique to Native American depression, (b) assist in the testing of cognitive theories of depression on Native Americans, (c) identify Native Americans at risk for depression and reveal possible predisposing factors, and (d) elucidate the similarity of Native American and Caucasian cognitions associated with depression by comparing the

ATQ-NA and ATQ. She theorized that if the cognitive content and frequency of Caucasian cognitions are generalizable to Native Americans, then cognitive-behavioral therapies should prove effective with Native Americans as well.

Using a Northern Cheyenne reservation sample, she found that the standard ATQ was a significantly better predictor of Beck Depression Inventory scores than the ATQ-NA. Although she acknowledged some limitations of her study (e.g., small sample size, written nature of questionnaires), Kunde concluded that the ATQ-NA is of limited utility. Her conclusions suggest that Natives and Caucasians have similar cognitive biases related to depression, inasmuch as the construct of depression is measured by traditional Westernized instruments.

#### *Culture and Attributional Style*

Social cognition research attempts to explain the manner in which people make sense of themselves and their social worlds. Much of this research, however, has been conducted by Westerners and has utilized samples comprised of Western majority culture members. In addition, although there is certainly individual variation in cognitive style, social cognition research tends to explore differences between Westerners and non-Westerners. Due to this bias in the social cognitive research to date, it is unclear whether principles such as the fundamental attribution error (i.e., bias to attribute behavior to dispositional qualities while simultaneously underrating the role of the external situation; Ross, 1977) and attributional styles may be an artifact of Western cultures, rather than underlying universal principles of human processing.

Some evidence suggests that social cognitive principles of attribution may be influenced by sociocultural norms. For example, Fletcher and Ward (1988) proposed that



the fundamental attribution error and group self-serving biases are not as dominant in non-Western cultures as in Western cultures. The individualistic-collectivistic paradigm (e.g., Hui, 1988) in particular has implications for attributional theory. Zahrani, Saad, and Kaplowitz (1994) hypothesized that Saudis, being more collectivistic, would engage in fewer internal attributions, less self-serving bias, more in-group-serving bias, and more out-group-derogating bias. Consistent with expectations, these authors found that Americans made more internal attributions than Saudis. Furthermore, Saudis showed more out-group derogating and intergroup bias than Americans.

Similar conceptually to the individualism-collectivism dichotomy, Markus and Kitayama (1991) proposed cultural variations in social constructs of the self. They suggested that persons from Western cultures are more likely to engage in independent construals of the self, whereas in non-Western societies interdependent self-construals predominate. For example, Kunda (1999) defined independent self-construals as occurring when "the self is viewed as an independent, autonomous, separate being defined by a unique repertoire of attributes, abilities, thoughts, and feelings" (p. 518). In non-Western societies, the self is viewed as interdependent, or part of a social network. In contrast with Western notions of self-actualization and personal achievement, non-Westerners "are socialized to strive for harmonious relations with others, to focus on the connectedness of individuals to one another, to adjust themselves to the demands of social situations, and to try to fit in with their social group" (p. 518).

Markus and Kitayama (1991) also proposed that in non-Western cultures, the self is construed as being dependent on contextual variables, and the focus of an individual's experience is on the "self-in-relation-to-other." Hsieh (1996) developed a measure to



assess the self-construal of 50 American and 50 Chinese women. She found that American women were more likely to have independent notions of the self, whereas Chinese women were more likely to have interdependent self-construals. Specifically, the Chinese women in the study were more concerned than the American women about the social context and reactions of significant others. This finding is consistent with the notion that Asians understand behavior in terms of interactions between personal dispositions and contextual factors, whereas Americans understand behavior as the direct unfolding of personal dispositions (Norenzayan & Nisbett, 2000). Other researchers have also surmised that Asians are more likely to attribute behavior externally than Westerners (e.g., Ho, 1976).

### *Culture and Values*

#### *American Indian Values*

Most of the literature examining cultural variations in cognition utilizes Asian versus Caucasian samples. Unfortunately, little is known about depressotypic cognitive differences between Caucasian and American Indian individuals. More information is known about value differences between American Indians and the dominant culture, however, and this knowledge also plays a critical role in understanding cognitive differences that might be manifested in therapy.

Although it is difficult to generalize about predominant values in American Indians given the significant within-group heterogeneity, some scholars have identified certain common traits associated with Indian persons. For example, Native cultures are often said to be "sociocentric" rather than "egocentric," meaning that Native individuals view themselves as part of an interdependent collective (Dillard & Manson, 2000). Self-

identity may be tied to one's family, tribe, or group, and decisions are strongly influenced by others. Furthermore, competition or the need for individual success is often less important than cooperation and humility (Richardson, 1981). Richardson also indicated that Indians usually have a holistic and fatalistic view of the world, such that the physical, mental, emotional, spiritual, and social aspects of self are interwoven. Some individuals also may believe that events happen according to a natural schedule (Horejsi & Pablo, 1993), which is in stark contrast to Western notions of autonomous control. Dillard and Manson (2000) emphasized that observational and oral learning styles are just as important as the more common "active" modes of learning associated with Western society.

Sue and Sue (1999) outlined several broad characteristics that many Indian individuals may possess. It is important to note, however, that researchers and clinicians must always measure acculturation, as the degree to which one adheres to traditional values is significantly moderated by one's assimilation into majority culture. First, Sue and Sue described the manner in which honor and respect are earned by sharing and giving, rather than accumulating material goods. Second, there is a cooperation value whereby tribe and family take precedence over the individual. This cooperative ideal may generalize to American Indians in therapy, such that they may find it easy to agree with the counselor in the session, but then will not follow through with the suggestions. Furthermore, many Native individuals may have been taught not to interfere with, but only to observe others. Third, present time orientation is a particularly salient cognitive orientation. Fourth, the usual family structure is extended, with interrelationships among a large number of relatives. In addition, a strong respect for elders should be expected.



Finally, Indians accept the environment, rather than control it, seeking harmony with nature.

Although no research has confirmed the effects of these value differences, clearly they may influence the applicability of CBT techniques and cognitive theories of depression. Herring (1990) challenged that counselors have a responsibility to consider these values when counseling Native clients. He also stated that "Just because a Native American seeks counseling does not necessarily indicate that the Native American has 'bought into' non-Native American ways and values," (p. 135).

#### *Anglo-American Values: Implications for therapy*

Therapy, specifically CBT for depression, is based on majority culture worldviews and assumptions regarding therapeutic effectiveness. Katz (1985) provided an explanation of the Anglo-American worldview and described the manner in which those values influence the delivery of therapeutic services. Anglos espouse independence and autonomy, including controlling the environment. This sense of individualism is a core construct of an Anglo worldview and includes personal identity, self-actualization, and locus of control (Waterman, 1981). Competition is valued; decision-making occurs according to the majority opinion within a hierarchical format. Communication is usually written, with verbal communication emphasizing direct eye contact, limited physical contact, and controlled emotion. In contrast to American Indian values, Anglo Americans measure power and status by money, possessions, titles, and positions. A "Protestant work ethic" demands rigid time schedules, planning, delayed gratification, and valuing of progress. Conceptions of physical beauty are derived from European cultures. Religion is defined in terms of Christianity. Finally, the scientific method



dictates thinking styles that are quantitative, dualistic, objective, rational, and linear, emphasizing cause and effect relationships.

Dana (1993) described the manner in which those particular Anglo-American values, beliefs, and behaviors parallel implicit conceptions of delivering effective therapy from a Westernized perspective. For example, individualism and competition values relate to a focus on autonomy in therapy and relate to using an intrapsychic, historical method to elicit relevant information. Action orientation corresponds to personal mastery and control by direct action. The value regarding hierarchical power relates to a preference for a service provider who is credentialed, professionalized, highly paid, and perceived as uniquely effective. Controlled communication implies the use of a verbal style with reflective listening, eye contact, and an expectation for self-disclosure. The Protestant work ethic implies that service should be hard work for both the provider and client. A scientific method orientation suggests that a provider should be objective, neutral, rational, linear, causal, quantitative, and evaluative. A progress and history focus makes services task-specific, sequential, and goal oriented. Even Anglo Americans' family structure pattern produces clinicians who value services that emphasize a nuclear family structure with explicit sex roles. Finally, the dominant cultures's religious, historical, and aesthetic principles translate into therapy that values WASP (white, Anglo-Saxon, Protestant) and YAVIS (young, attractive, verbal, intelligent, and successful) providers (Dana, 1993). Thus, for persons seeking mental health services who do not subscribe to stereotypical Anglo-American beliefs, therapy from a Westernized perspective may need to be adapted to be more consistent with their cultural background.

### CBT for Depression: Administration, Principles and Acceptability

Beck's CBT (Beck, Rush, Shaw, & Emery, 1979) is the most widely reviewed treatment for major depressive disorder (cf. Craighead, Craighead, & Ilardi, 1998). Typically, 50-70% of depressed patients who complete CBT no longer meet criteria for major depression at posttreatment. In fact, one study found that 16 weeks of CBT was at least as successful as one year of antidepressant treatment (Evans et al., 1992). Numerous other controlled outcome trials have further supported the efficacy of CBT (e.g., Beck, Hollon, Young, Bedrosian, & Budenz, 1985; Rush, Beck, Kovacs, & Hollon, 1977; Blackburn, Eunson, & Bishop, 1986; see Dobson, 1989, for a meta-analysis of 28 controlled trials).

Individuals who have recovered from clinical depression often view their presenting problems more benignly than they did while they were depressed (Beck, 1987). Indeed, Evans and Hollon (1988) asserted that CBT is predicated on the notion that correcting negative cognitive distortions produces profound relief from the affective, behavioral, motivational, and vegetative components of depression. Evans and Hollon also argued that CBT works by sharpening reality-testing skills, specifically by training depressed clients to be more systematic and normative in their information processing.

CBT is an approach that attempts to treat disorders by altering cognitions or cognitive processes (Hollon & Beck, 1986). It utilizes an empirical hypothesis-testing approach to modify dysfunctional cognitions. Although CBT has demonstrated efficacy with a variety of disorders (Beck & Rush, 1988), it has been shown to be especially effective with unipolar depression (Clark & Beck, 1990). Addressing CBT's mechanism of change, Beck (1967b, 1976, 1987) contended that faulty information processing



contributes to and maintains the affective, behavioral, motivational, and physiological symptoms of depression. CBT works to modify this faulty information processing by focusing on cognitive functioning at the cognitive product, processing, and schema levels.

There are three core assumptions that form the basis of CBT (Clark & Beck, 1990). The first assumption is that in order to effect real change, the manner in which an individual processes information must be modified. The second assumption is that CBT may be effective with a variety of mental disorders, as maladaptive cognitions and processing are an integral part of the symptomatology of many psychopathological disturbances. The final assumption holds that because each disorder has a unique cognitive profile, CBT must be specifically tailored to each condition (e.g., modifying catastrophic misinterpretations of bodily sensations in panic disorder).

There are three major stages in the conduct of CBT. Specific steps include an early stage of treatment focusing on training the patient to identify and evaluate negative cognitions and automatic thoughts. At the same time, patients begin to identify errors in thinking and test inferences based on their biased informational processing. Another important component involves teaching the patient to identify his or her distortions in thinking, such as catastrophizing or overgeneralization. Toward the later stages, the therapist focuses on identifying and evaluating underlying dysfunctional beliefs that perpetuate psychological disturbance (Beck, 1995).

Beck (1979) detailed a typical course of CBT for depression, consisting of 22 sessions of individual psychotherapy. In sessions one and two, the therapist provided the rationale for CBT, assigned activity scheduling for homework, and administered self-

report measures of personality and life history. In the third and fourth sessions, the therapist assigned homework for the client to record cognitions during periods of emotional distress in order to elicit the relation between thinking, behavior and affect. This generated data which the therapist used to discuss specific cognitions leading to unpleasant affect.

In session five, the therapist identified recurrent or common themes in the client's cognitions. The client continued to do behavioral assignments for homework as well. During the sixth through eighth sessions, the therapist continued to review cognitions, particularly self-expectations. The client's homework during this time was to continue to recognize cognitive errors and to review alternative explanations for negative automatic thoughts. In the ninth through eleventh sessions, the therapist focused on the client's self-criticisms and worked on improving coping responses. In sessions twelve to fifteen, the therapist attended to the client's self-criticisms, with a focus on relevant underlying assumptions. In the last sessions, the therapist worked to consolidate therapeutic gains.

Implicit in this example of CBT for depression are some underlying principles. Clark and Beck (1990) described these ideas as integral to the philosophy of CBT. First, collaborative empiricism, whereby the patient and therapist act as "coinvestigators," is encouraged. Also, Socratic dialogue is used to guide the patient toward accepting logical conclusions regarding the unrealistic nature of his/her heretofore erroneous assumptions and beliefs. Subsequently, through a guided discovery process, these maladaptive beliefs and attitudes are modified. Behavioral experiments act as new experiences that promote the acquisition and consolidation of new skills and thinking strategies. Clark and Beck emphasized that the therapist's role is to help patients evaluate their maladaptive thinking



styles, rather than forcing patients into accepting new beliefs or assumptions. They also asserted strongly that at the outset of treatment the patient must be educated regarding the cognitive model, implying that the efficacy of CBT depends upon a patient understanding and accepting the treatment rationale.

Given that the underlying mechanism responsible for CBT's success is the modification of depressive cognitions, it seems logical that those depressed patients who present with high levels of depressotypic cognitions would be especially strong candidates for this treatment approach. However, Rude and Rehm (1991) found that patients scoring low on pretreatment measures of depressotypic cognitions actually respond best. Craighead et al. (1998) proposed that perhaps this finding is consistent with the capitalization hypothesis, an idea which suggests that effective therapies capitalize on preexisting strengths (Cronbach & Snow, 1977). However one accounts for this phenomenon, it is clear that even if one found differences between American Indians and Caucasians in terms of their depressotypic cognitions, that would not necessarily rule out the efficacy of CBT. In fact, Rude and Rehm's finding suggests that cross-cultural studies should explore both typical cognitive patterns between groups and adherence to a CBT model before determining whether CBT would be an effective treatment approach.

#### *Culture and CBT*

Because there may be cross-cultural variation in cognitive style, there may be a differential prevalence, etiology, and expression of depression in various cultural groups. There may also be different responses to treatment among various cultural groups. For example, given the interdependent self-construals Asians may adopt, they may be more receptive to a group therapy format than an individual therapy format. Indeed, Padesky

and Greenberger (1995) suggested that clients who are strongly tied to their community may benefit more from group therapy than from individual therapy.

As stated previously, CBT (Beck et al. 1979) is a widely adopted, efficacious psychological treatment for various types of psychopathology, including major depression. The underlying mechanism of CBT is teaching the patient how to recognize and counter maladaptive negative thoughts. Because therapy is focused strongly on the cognitive attributions characteristic of psychopathology from Western emphasis and experience, it follows that this therapeutic approach may not be as effective for people of non-Western cultures as it is for people of Western cultures (Schieffelin, 1985). Unfortunately, there has been little research to date that evaluates the efficacy of CBT for different cultural groups, and there have been no studies that have specifically investigated CBT's effectiveness with American Indians. Kaiser, Katz, and Shaw (1998) suggested that the suitability criteria for CBT, as outlined by Safran and Segal (1990), may need modification for culturally diverse individuals. Specifically, these suitability criteria include 10 items: (a) accessibility of automatic thoughts, (b) awareness and differentiation of emotions, (c) acceptance of personal responsibility for change, (d) compatibility with cognitive rationale, (e) alliance potential: in-session evidence, (f) alliance potential: out-of-session evidence, including previous therapy, (g) chronicity of problems, (h) security operations, (i) focality (i.e. ability to maintain a problem focus), and (j) general optimism regarding therapy.

Hays (1995) argued several key points integral to the provision of psychotherapy to minority clients. Mainstream psychological research largely ignores the importance of cultural influences and marginalizes studies that include cultural minorities. A client's



culture is seen as a separate category of human experience that only complicates the therapist's understanding and case conceptualization. In addition, theories of psychotherapies were developed with highly ethnocentric philosophies, giving little or no consideration to how people different from the majority of psychologists may approach the treatment of psychopathology.

On the other hand, Hays (1995) also defined several features of CBT that make it particularly useful for utilization with clients from diverse backgrounds. First, it is rooted in the principle that therapy must be adapted to meet the needs of the individual, for the purpose of increasing the appropriateness and effectiveness of therapy for each client. Second, its methods focus on client empowerment. Hays emphasized that respect and understanding related to a client's unique situation contribute to a collaborative relationship, in which individual and cultural differences are appreciated rather than negated. Third, the attention on conscious processes and specific behaviors may be particularly appropriate for clients from diverse cultures, especially when a language barrier is present. This attribute of CBT also minimizes assumptions that may be erroneous concerning clients' underlying manifestations of psychopathology. Finally, the integration of assessment throughout therapy emphasizes therapeutic progress from the client's perspective.

Other scholars have identified similar attributes of CBT that may maximize its effectiveness with minorities. These include: (a) the number of theoretical constructs inherent in the approach is minimal, (b) present time orientation, (c) emphasis on action rather than verbal expressiveness, (d) acknowledgement of environmental factors, and (e) the partnership approach (collaborative empiricism). All of these characteristics of CBT

make its usage with minority clients particularly appropriate (Casas, 1988). In particular, these attributes minimize potential errors that may arise from a therapist's unfamiliarity with a minority client's cultural background and customs. These characteristics of CBT also facilitate an inviting forum in which the clinician and client can talk together about idiographic cultural and social issues that may be uniquely affecting the client's pathology.

Even with these relatively clear advantages of CBT, it is not without its limitations. Hays claimed that majority culture values are often assumed to be universal. Yet, values such as assertiveness, personal independence, verbal ability, and change, which are highly valued in the United States in general, are not necessarily universal. Because of this concern, she outlined several possible limitations for the utilization of CBT with minority clients. First, psychotherapists must strive to see therapy's subtle biases toward values supported by the dominant culture. Second, CBT lacks a focus on a client's personal history, which may impact significantly on both the development of psychopathology and symptom presentation, especially in oppressed groups. Third, the emphasis on rational thinking and the scientific method may be counterintuitive in many cultures.

Padesky and Greenberger (1995) highlighted the ways in which culture plays a powerful role in shaping each level of thought, specifically, the automatic thoughts, underlying assumptions, and schemata emphasized in CBT. For example, it is generally assumed that Americans have an individualistic schema, as opposed to group or collectivistic. Underlying assumptions, defined as conditional rules or "should" statements used to guide our behavior, emotional expression, and understanding of how



the world operates, may also vary cross-culturally. Westerners associating characteristics such as direct eye contact and smiling with friendly persons is illustrative of this point. Finally, automatic thoughts may differ in various cultural groups. Padesky and Greenberger (1995) provided the following example: "A European man with a rapid heart rate may panic following the thought 'I'm having a heart attack.' A Chinese man experiencing rapid heart rate may panic with the thought 'I'm haunted by an evil spirit who will kill me.'" (p. 40). Therapists should be aware that cultural differences exist in all these areas and that skillful case conceptualization includes recognition and understanding of these differences.

Padesky and Greenberger (1995) also offered several guidelines for adapting CBT for use with multicultural populations. They suggested the therapist should listen carefully for cultural influences in what the client says. A therapist should consider how these influences impact the conceptualization of the client's problems and treatment plan. Therapists also should educate themselves regarding cultures in which they are providing services, consult with colleagues, and openly discuss culture with clients, including discussing their own limitations.

#### *CBT with American Indian Clients*

Renfrey (1992) identified ways in which CBT may be especially suited for American Indian clients. Although no controlled treatment outcome studies have examined the efficacy of CBT with American Indians, he posited that its present time and action orientation and even its directiveness are advantageous characteristics of CBT that may maximize the effectiveness of this therapeutic method. He further offered that these

characteristics of CBT are compatible with the worldview of many American Indian clients.

Renfrey also proposed that therapists conducting CBT with American Indians should be careful to demonstrate high levels of cultural sensitivity to minimize potential therapy-interfering behaviors or assumptions. For example, although basic behavioral principles do generally apply, even across species, one should not assume that other higher-level, cognitive-behavioral principles are universal or independent of cultural variations. Because learning histories may be radically different between Native clients and non-Native therapists, invalid functional analyses may result. Diagnostic classifications may not be appropriate. Rapport may be hard to develop because of long histories of exploitation by the dominant culture. Pause time between speakers may be longer. Sensitivity to these and other cultural considerations may enable the development of interventions that maximize congruency with the client's worldview and cultural practices.

Other general considerations are important to note in counseling American Indians. Herring (1990) suggested that American Indians do not respond sincerely or voluntarily to nondirective leadership. He explained that Natives may assign a powerful, expert status to non-Natives who are providing counseling. He emphasized that counselors should be flexible and should use whatever means are available to achieve positive results. Finally, like other researchers (e.g., McDonald, Morton, & Stewart, 1993; Heinrich, Corbine, & Thomas; 1990), he stressed the necessity of measuring acculturation in order to further understand the client's perspective.



Fiferman (1989) conducted one of few studies aimed at maximizing therapeutic efficacy for depression in American Indians. He created a vignette describing a person with depression and provided college students with treatment rationales for cognitive, behavioral, client-centered, and traditional Native American therapy. He then asked his Native and Caucasian participants to rate the acceptability of each therapeutic approach. As he predicted, traditional Native American participants rated the client-centered and Native American treatment as more acceptable than non-traditional Native American and Caucasian participants. Interestingly, Caucasians and more acculturated Native Americans rated CBT as the most acceptable mode overall. Clearly, his findings illustrate the value of assessing participants' acculturation status. These results imply that at least some American Indians would prefer treatment modalities other than CBT, the assumed "gold standard" intervention for major depressive disorder. In addition, his finding is contrary to the literature that supposes that CBT is a particularly pleasing approach to minority clients.

#### Summary

Although several clinicians have hypothesized reasons why CBT may be especially suitable for minority clients, there is little empirical evidence to support such claims. Two studies, however, have explored ways in which CBT may or may not be particularly appropriate with American Indian clients. The first study suggested that American Indians and Caucasians were characterized by similar depressotypic cognitions (Kunde, 1985). The investigator concluded that CBT, which targets such cognitions, may be equally effective in the two cultural groups. In contrast, the second study revealed that traditional American Indians preferred client-centered and Native American treatment

over CBT (Fiferman, 1989). Therefore, it is possible that although CBT could reduce depressive symptoms through targeting dysfunctional cognitions, CBT may not be the treatment of choice for depressed Native individuals.

The second finding is particularly important because treatment acceptability is an important predictor of therapeutic success. If clients find a particular therapeutic approach unacceptable or do not demonstrate a preference for the characteristics of the approach, then its appeal and potential efficacy are minimal (Cross-Calvert & McMahon, 1987). Finding applicable treatment approaches for depression is particularly salient when working with American Indians, as depression is the most frequently diagnosed mental health problem for Indians presenting for treatment at a mental health facility (Sue, 1977; American Indian Health Care Association, 1978; Rhoades et al., 1982). In fact, major depressive disorder accounts for as much as 40 percent of patient caseloads in these settings (Manson, Shore, & Bloom, 1985). Furthermore, research has indicated that American Indian clients are more likely to terminate psychotherapy sessions prematurely than Caucasian clients (Norton, 1999).

Undoubtedly there is much to learn about the nature of depression in American Indians. It remains to be empirically determined whether cognitions posited to account for the etiology and maintenance of the disorder are similar between American Indians and Caucasians. Furthermore, given the high incidence of depression in this group, it is essential that the most effective therapeutic techniques be employed. The current study was an investigation of the nature of depressotypic cognitions, as well as the perceived applicability of CBT, in a community sample of Caucasians and American Indians.



### *Design and Specific Hypotheses*

The purpose of the present study was twofold: (a) to determine the relative applicability of CBT approaches and assumptions in Caucasians and American Indians, and (b) to evaluate whether depressotypic cognitions are equally prevalent in both groups. However, it was necessary to develop a measure of CBT applicability before proceeding to the cross-cultural investigation. The development of this measure is presented below as Study One, whereas the subsequent cross-cultural design is described as Study Two.

#### *Study One*

Because there was no existing measure of CBT desirability, an applicability scale for CBT (Cognitive Behavioral Applicability Scale; CBT-AS) was constructed to explore the first aim of the study. In Study One, the CBT-AS was administered to a sample of undergraduates from the University of North Dakota (UND). The instrument was subjected to reliability and factor analyses to establish its psychometric properties prior to its inclusion in the second study.

#### *Study Two*

In Study Two it was first hypothesized that Caucasian individuals would indicate higher levels of agreement with treatment characteristics that are part of a CBT therapeutic framework than American Indian individuals. Second, it was predicted that scores on measures of depressotypic cognitions would discriminate between the two cultural groups. Finally, it was hypothesized that American Indians who were more

culturally assimilated would have scores more similar to Caucasians than the American Indians who were less culturally assimilated.

To rule out pre-existing differential levels of depressive symptomatology between Caucasian and American Indian participants, an initial t-test was conducted to assure there were no statistically significant differences in Beck Depression Inventory-II scores between the two groups. This was done to ensure that differences in depressotypic cognitions between the groups were not due to differences related to varying levels of pathology, but instead could more confidently be attributed to cultural differences. It is important to note this is not absolute equivalence in depressive symptomatology, but equivalence only in terms of how depression is conceptualized according to the questions in the BDI-II.

To test the first hypothesis, a discriminant analysis procedure (Green, Salkind, & Akey, 2000) was used to determine if CBT-AS scores would predict group membership (i.e., Caucasian or American Indian). To test the second hypothesis, scores on measures of depressotypic cognitions were employed as independent variables in a discriminant analysis procedure to predict group membership. An additional discriminant analysis procedure tested the final hypothesis that American Indians who were more culturally assimilated would have scores more similar to Caucasian participants on the cognitive measures and the CBT-AS. Finally, post-hoc ANOVAs were conducted to assess differences among the three groups on specific measures.



## CHAPTER II

### METHOD

Prior to any data collection, feedback regarding the cultural sensitivity of the study was solicited from a focus group of 10 Northern Plains undergraduate and graduate students, who were part of the Indians into Psychology Doctoral Education (INPSYDE) program at the University of North Dakota. Focus group members met with the investigator to discuss the measures to be utilized as well as the design of the study. The aim of conducting the focus group meeting was to gather information to construct an appropriate research design that would maximize cultural sensitivity and relativity (Hughes & DuMont, 1993). The UND student focus group indicated that the study design and materials appeared culturally acceptable to them. The group discussed additional information related to the topics under investigation that is described in Appendix A.

#### Study One: Cognitive Behavior Therapy Applicability Scale Development

The first phase of this study involved the development of the CBT-AS. An explanation of the CBT-AS construction and validation procedure, as well as demographic information for the standardization sample, is provided below. Because development of the CBT-AS was an integral part of this study, comprehensive psychometric data for the CBT-AS are given in the Results section.

### *Rational Scale Construction*

The purpose of the CBT-AS was to measure perceptions of CBT suitability. Respondents were asked to imagine they were seeking psychotherapy, and then rate how much they agreed with therapy or counseling having certain characteristics. The CBT-AS items were derived from delineating various constructs inherent in a CBT approach.

A number of items assessed the extent to which respondents preferred therapeutic services to be based on Beck's (1995) principles of CBT. These 10 principles include: (a) CBT is based on an ever-evolving formulation of the patient and his/her problems in cognitive terms; (b) CBT requires a sound therapeutic alliance; (c) CBT emphasizes collaboration and active participation; (d) CBT is goal oriented and problem focused; (e) it initially involves the present; (f) it is educative; (g) it aims to teach the patient to be his/her own therapist; (h) it emphasizes relapse prevention; (i) it is time limited (4-14 sessions); (j) it involves therapy sessions that are structured; (k) it teaches patients to identify, evaluate, and respond to their dysfunctional beliefs and attitudes; and (l) it uses a variety of techniques to change thinking, mood and behavior, including behavioral activation. Such items included "I would have to set goals related to my current problems" and "I would learn to be 'my own therapist,' so that I can begin to deal with things without needing help."

Other items were based on the suitability criteria of patients for CBT (Safran & Segal, 1996). For example, Safran and Segal suggested that successful outcomes depend on clients demonstrating an acceptance of personal responsibility for change. The CBT-AS item "I would have a very active role in whether I feel better" assessed this specific characteristic.



The remaining items on the CBT-AS defined constructs that are believed to enhance or diminish the efficacy of CBT with culturally diverse clients. For example, Casas (1988) posited the action orientation of CBT might increase its effectiveness with minorities, due to empowering effects. This specific construct is measured with the CBT-AS item "I would be directed to do some activities (example: therapist might ask me to go walking three times a week) rather than just talking." Similarly, the directiveness of CBT may be congruent with the needs, values, and expectations of American Indians in particular, as they expect clinicians or healers to give them specific instructions to promote well being (cf. Renfrey, 1992). The CBT-AS item "I would answer the therapist's directive, straightforward questions" tested this assertion.

#### *Participants*

Two-hundred twenty-two UND undergraduates were recruited from lower-level psychology classes and were administered the CBT-AS. In addition, to establish test-retest reliability, 125 of these students completed the scale again after a two-week interval. In the initial standardization sample, 100 (45%) participants were male and 120 (54.1%) were female. Two-hundred eight (93.7%) respondents were Caucasian-American. There were no African-American respondents, one (0.5%) was Asian-American, one (0.5%) was Hispanic-American, nine (4.1%) were American Indian, and two (0.9%) endorsed Other as their ethnic background. An independent samples t-test was performed to determine if CBT-AS total scores varied according to gender. No significant group difference was found,  $t(1,218) = 0.10$ ,  $p = .92$ . The mean age of the participants was 20.92,  $SD = 6.64$ , with a range of 18-54 years old. There were no inclusion or exclusion criteria other than being at least 18 years of age.

### *Procedure*

After providing informed consent (see Appendix B), participants completed a demographic questionnaire (see Appendix C) to determine age, gender, ethnic background, and tribal affiliation if appropriate. Participants were also administered the prototype CBT-AS (see Appendix D), which contained the following additional short-answer items: (a) Were these questions clear? (b) Did you understand these items? and (c) Are there any other important factors you would consider if you sought therapy? Participation in the study required approximately twenty minutes. Participants were then debriefed (see Appendix E) and informed about their compensation of commensurate course credit for completing the study. Before beginning the study, students also were informed that participation was voluntary and they might withdraw at any time.

#### Study Two: Cross-Cultural Examination of Depressotypic Cognitions and CBT-Applicability

The second phase of this study was a cross-cultural comparison of CBT applicability and depressotypic cognitions between American Indians and Caucasians. Demographic characteristics for both the Caucasian and American Indian participants are provided below. The psychometric properties for the various instruments used in this study to assess background information, cognitive biases, CBT applicability, and depressive symptomatology are then described. Last, coding procedures for one of the cognitive measures, the Cognitive Response Test (CRT), are outlined.



### *Participants*

Ninety-five American Indian individuals were recruited from the annual Time-Out Wacipi Pow-Wow held at the University of North Dakota in April, 2002. After obtaining permission from the UND Indian Association (UNDIA), experimenters set up a table at the Pow-Wow in exchange for providing UNDIA demographic information regarding Pow-Wow attendants. There were no inclusion or exclusion criteria other than being at least 18 years of age. All participants were informed that participation was voluntary and they might withdraw at any time. They received \$5 for completing the packet of questionnaires.

Caucasian individuals from the community were recruited from the Grand Forks Blues Festival, held in June 2002. The investigator received permission from the event coordinator for experimenters to set up a table and recruit individuals in the same manner as the Pow-Wow data collection. Additional community members were recruited through area advertisements in the Grand Forks Herald (see Appendix F for advertisement) and on local television channel three (see Appendix G for advertisement). They also received \$5 for completing the packet of questionnaires. There were no inclusion or exclusion criteria other than being at least 18 years of age.

Forty-one Caucasian and 41 American Indian individuals were matched on the basis of their age and gender equivalence as the final sample of individuals for analyses. The mean age of the American Indian group was 35.12 ( $SD = 12.20$ ), and the mean age of the Caucasian group was 35.56 ( $SD = 12.28$ ). Both groups included 13 men and 28 women. The Hollingshead Socioeconomic Status (SES) Index was computed for both groups using the mother's and father's educational level and type of employment. The

American Indian group had a total mean SES Index score of 38.02 ( $SD = 13.52$ ), and the Caucasian group had a mean score of 38.66 ( $SD = 12.60$ ). The differences between groups was not significant,  $t(53) = -0.18, p = .86$ . These results suggest that socioeconomic status, as measured by the Hollingshead Index, was similar for both groups. The American Indian individuals were also asked to provide their tribal affiliation. Using the terminology the individuals provided, the tribal affiliations are shown in Table 1.

Table 1. Tribal Affiliations of American Indian Participants.

Group	Number
Navajo	2
Hidatsa	1
Three Affiliated Tribes	5
Ojibwe (Chippewa)	5
Red Lake	4
Oglala Sioux	2
Omaha	1
Canadian Cree	1
Mandan	1
Spirit Lake	4
Standing Rock	3
Ft. Peck Sioux	1
Turtle Mountain	4
Turtle Mountain and Three Tribes	1
Spirit Lake and Turtle Mountain Chippewa	1
Leech Lake	1
Dakota Sioux	1
White Earth	1
Spirit Lake Dakotah	1
Unknown	1



## *Materials*

### *Background information*

A demographic questionnaire (see Appendix C) determined subjects' age, gender, ethnic background and tribal affiliation (where applicable), socioeconomic status (according to Haug & Sussman, 1971), and religious orientation.

Participants also completed the Orthogonal Cultural Identification Scale (OCIS; Oetting, Swaim, & Chiarella, 1998; see Appendix H). The OCIS is a six-item instrument that measures cultural identification with one or more cultural groups. Each aspect of cultural identification is assessed in terms of the respondent and the respondent's perception of his/her family (e.g., "Does your family live by or follow: (a) a White American or Anglo way of life (b) an American Indian way of life (c) a Mexican American way of life?"). Oetting et al. reported a coefficient alpha (Cronbach, 1951) of .80. Oetting et al. also demonstrated acceptable construct validity for the OCIS, such that Indian values and cultural activities were correlated with Indian identification ranging from .39 to .74, whereas the range of correlations between Indian values and White American identification was only .18 to .26. The coefficient alpha for American Indian affiliation in the present study was .97.

### *Cognitive biases*

The Extended Attributional Style Questionnaire (EASQ; Metalsky, Halberstadt, & Abramson, 1987; see Appendix I) was developed to remedy the reliability problems of the original Attributional Style Questionnaire (Peterson et al., 1982). The EASQ instructs respondents to "vividly imagine" 12 separate hypothetical scenarios involving themes of achievement or affiliation. These 12 scenarios describe events with unpleasant

outcomes. Using a Likert-type scale, attributions related to each event are rated along three dimensions: internal-external, stable-unstable, and global-specific. The EASQ improved upon the original ASQ by including 12, rather than six, negative outcomes and a sufficient number of achievement and interpersonal negative outcomes so that these two scales could be examined separately (Metalsky et al., 1987). Metalsky et al. found coefficient alphas of .79 and .77 for the negative achievement and interpersonal outcomes vignettes, respectively.

The EASQ also has been effective in predicting depressive symptoms in college students (e.g., Metalsky & Joiner, 1992). Joiner and Metalsky (1999) assessed the factor structure of the EASQ and found evidence supporting the integrity of the attributional dimensions of internality (alpha ranged from .55 to .60), stability (alpha ranged from .85 and .82), and globality (alpha ranged from .82 and .79). The somewhat lower reliability of the internality scale was hypothesized to be a construct-related, not instrument-related problem. The internality scale's somewhat lower reliability is consistent with other measures that assess dimensions of this concept (e.g., Anderson & Riger, 1991; Bentall, Kinderman, & Kaney, 1994). Furthermore, the reliability coefficient of approximately .60 has been deemed acceptable for research purposes (cf. Nunnally, 1978). The overall coefficient alphas with the present sample were .45 for the internality scale, .79 for the stability scale, and .81 for the globality scale. Although the reliability coefficient for the internality scale is less than desirable, it is not of concern for purposes of the present study as only EASQ generality scores were computed, which are derived from averaging the stability and globality subscales.



To discriminate between cognitions specifically related to depression versus anxiety, participants completed the Cognition Checklist (CCL; Beck, Brown, Steer, Eidelson, & Riskind, 1987; see Appendix J). Respondents rated the frequency of 26 thoughts related to depressive (Cognition Checklist Depression scale; CCL-D) and anxious (Cognition Checklist Anxiety Scale; CCL-A) symptomatology. The CCL-D includes such items as "I'm worthless," whereas the CCL-A contains phrases like "Something awful is going to happen." The respondent rated the frequency of each response on a five-point scale ranging from 0 (never) to 5 (always). Taylor, Koch, Woody, and McLean (1997) examined reliability and validity of the CCL with depressed individuals. They found Cronbach alpha coefficients for the CCL-D and CCL-A of .92 and .89, respectively, indicating the measure had good internal consistency. In addition, the 10-week interval test-retest reliability correlations were .58 for the CCL-D and .68 for the CCL-A. Furthermore, these authors examined the convergent and discriminant validity of both scales. The CCL-A was significantly correlated with the Beck Anxiety Inventory (BAI),  $r = .63$ ; its correlation with the Beck Depression Inventory (BDI) was significantly smaller,  $r = .43$ . Similarly, the correlation between the CCL-D and BAI was small ( $r = .22$ ), and significantly less than the correlation between the CCL-D and the BDI ( $r = .73$ ). Zero-, one-, and two- factor solutions were subjected to confirmatory factor analytic procedures to confirm that anxious cognitions and depressive cognitions were separate constructs. Results indicated that the two-factor structure yielded the best goodness-of-fit index and was the most stable structure (Taylor et al., 1997). Coefficient alphas obtained on the sample for the present study were .87 for the CCL-D and .89 for the CCL-A.

Finally, participants completed the Cognitive Response Test (CRT; Watkins & Rush, 1983; see Appendix K), which utilizes an associative technique to elicit immediate thoughts relevant to depression. A sample vignette from the CRT is "After getting up in the morning, while dressing, I look at myself closely in the mirror and think..." Participants are instructed to write the first thought they would have in these situations. Responses are scored as rational, irrational-depressed, irrational-other, or non-scorable. Responses scored as irrational-depressed represent negative cognitions consistent with Beck's depressogenic negative cognitive triad (i.e., negative views of the self, world, or future; J.T. Watkins, personal communication, September, 2001). Rational responses are related logically to the vignette probe and often contain a qualifier such as "maybe" or "might" (Watkins & Rush, 1983). Irrational-other responses are thoughts that are not rational, but do not meet criteria for the negative cognitive triad.

Internal validity data are satisfactory, with a mean interjudge correlation of .84 across subjects and response types (Watkins & Rush, 1983). The CRT has been used with a variety of populations, including depressed and recovered depressed patients, psychiatric controls and normal individuals, and non-psychiatric hospital patients (Wilkinson & Blackburn, 1981; Watkins & Rush, 1983; Dobson & Shaw, 1986). This measure has demonstrated adequate discriminative validity, such that the irrational-depressed subscale distinguished depressed from nondepressed controls (psychiatric, medical, normal). Specifically, irrational-depressed responses were two to four times greater in depressed inpatients than in controls (Watkins & Rush, 1983).



### *CBT applicability*

To assess participants' perceptions of CBT parameters, the factor-analyzed version of the CBT-AS (see Appendix L) was administered. The CBT-AS is a measure designed by the investigator to examine both suitability criteria and assumptions regarding principles for CBT. Respondents rated via a Likert-scale format (where 1 = disagree strongly and 5 = agree strongly) their preference for various characteristics inherent in a CBT therapeutic paradigm.

The coefficient alphas for the three scales with the community participants were: .87 for Focused In-Session Behavior, .78 for Active Stance, and .81 for Structured Therapeutic Relationship. Comprehensive psychometric data for the CBT-AS will be described in the Results section.

### *Depressive symptomatology*

Participants completed the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). The BDI-II is a 21-item self-report measure of depression that has been widely used in clinical and research settings. It measures affective, behavioral, cognitive, and somatic symptoms of depression (Beck, Ward, Mendelson, & Erlbaugh, 1961). Each item consists of four self-evaluative statements, with intensity scores that range from 0 to 3. The BDI has been used effectively in multiple cultures (e.g., Marsella et al., 1975) and has been shown to have a high correlation with other depression scales (Beck & Beamesderfer, 1974). In addition, the BDI-II has been successfully utilized with American Indian populations (e.g., Porter, Zvolensky, & McNeil, 2001). The BDI-II demonstrates high internal reliability with an alpha of .91 (Dozois, Dobson, & Ahnberg, 1998). The Cronbach's coefficient alpha in the present sample was .92.

### *Procedure*

After signing an informed consent form (see Appendix M), participants completed a packet containing the self-report measures assembled in random order. Participants were then debriefed (see Appendix N) and offered compensation for participation. Dana (1994) pointed out that self-report formats for assessing American Indians could be culturally inappropriate and argued that an interview-based format may be more desirable. However, the focus group of American Indian students provided guidance early in the study as part of a comprehensive effort to take into account cultural factors. In addition, the entire protocol was conducted under the direct supervision of the investigator. Participants were encouraged to ask any questions or clarify items on the questionnaires, and they were closely monitored to determine if they needed assistance and ensure they understood how to complete the measures. Participation in the study required approximately one hour.

### *CRT Coding*

The investigator and an advanced graduate research assistant affiliated with the UND Anxiety Research Group (i.e., members of Dr. Amy Wenzel's research team) served as trained coders to score the CRT. Coders were kept naive to group membership of the participants through a process of dummy coding by a third research assistant. Criteria were established for scoring the CRT based on operationalizing Beck's negative cognitive triad, as outlined in Watkins and Rush (1983; see Appendix O). Each response of each participant was coded based on content and assigned one of four possible ratings: (a) rational, (b) irrational-depressed, (c) irrational-other, or (d) non-scorable. The total number of each rating was calculated for each subject.



To achieve reliability and ensure correct scoring procedures, a pilot sample of CRT questionnaires was co-scored by the coders and Dr. John Watkins (see Appendix P for correspondence with Dr. Watkins), who developed this instrument. Dr. Watkins was also available for ongoing coding supervision, and he was consulted to obtain his opinion regarding several CRT coding issues, such as how to code responses that contained cognitions from the past, because they are not technically part of Beck's negative cognitive triad. This pilot sample of results was obtained from 23 undergraduate and graduate students from the Anxiety Research Group. These individuals agreed to complete the CRT as pilot data to be used for the coders to achieve reliability.

A minimum average weighted kappa of 0.70 was required before the raters could individually code study data. Once this had been achieved, study data were assigned to be coded by each coder individually. Between 5 and 10 response sets were coded by each coder weekly. The coding team met weekly for consensus coding and to prevent rater bias and drift. In each weekly meeting, additional rules were added to the initial coding instructions based upon issues and questions each coder encountered. Coders agreed that it would be helpful to refer to prototype responses to assist in coding, which are presented in Appendix Q. To monitor inter-rater reliability, 2 of every 20 response sets were randomly selected. Kappas were then calculated for these response sets, in addition to an overall kappa for the all response sets coded to date.

The kappa for the pilot data was 0.71, and the percent agreement was 82%. The on-going kappas and percent agreements for all data are presented in Appendix R. The final inter-rater reliability (including pilot data) consisted of a final overall kappa of 0.75, with a final overall percent agreement of 85%.

## CHAPTER III

### RESULTS

#### Study One: CBT-AS Validation

##### *Psychometric Characteristics*

The mean total score on the CBT-AS was 92.78 with a standard deviation of 9.25. The median for the standardization sample was 92.00 and the mode was 88.00. Scores ranged from 59 to 119. Mean scores for all 24 CBT-AS items are presented in Table 2.

##### *Reliability*

A coefficient alpha of .84 suggests the measure has high internal consistency. Because Cronbach's alpha is a "necessary but not sufficient" measure of unidimensionality for a scale (see Clark & Watson, 1995), average interitem correlations were also computed to derive a more sophisticated measure of internal consistency. The overall mean interitem correlation was .17, which falls into the range recommended by Clark and Watson, and this relatively low correlation is desirable given the broad nature of the construct of CBT applicability (i.e., the degree of acceptability of various characteristics inherent in a CBT therapeutic paradigm). The mean interitem correlations for all the items are given in Table 3. A Pearson correlation coefficient of .56 established a moderately high level of two-week test-retest reliability for the scale.



### *Validity*

Although analyzing concurrent, discriminant, and predictive validity was beyond the scope of this study, qualitative measures of face validity were obtained. Participants responded to the pilot CBT-AS items (a) Were these questions clear? (b) Did you understand these items? and (c) Are there any other important factors you would consider if you sought therapy? Results are presented in Appendix S. Eighty-two percent of the participants stated that the items were clear, and 92% stated the items were understandable. Frequent responses to the item related to other factors influential in help-seeking behavior were: cost, reputation and personality of the therapist, mutual goals of the client and therapist, confidentiality, gender (most explicitly stated they prefer female therapists), preference for younger therapists who could relate to undergraduates, and being able to trust the therapist.

Table 2. Mean Scores for CBT-AS Items.

Item	Mean	SD
I would deal a lot with how I'm thinking about things in my life.	4.11	0.72
I would need to trust the therapist.	4.68	0.63
I would need to work together with the therapist.	4.30	0.76
I would be encouraged to take a teamwork approach—together the therapist and I would decide what to work on.	4.02	0.74
I would have to do assignments that apply what I learned between sessions.	2.96	1.02
I would focus on specific problems I'm dealing with.	4.31	0.68
I would have to set goals related to my current problems.	4.09	0.81
I would work on things I'm dealing with right now, not things from my past.	2.61	1.11
I would learn how to be "my own therapist," so that I can begin to deal with things without needing help.	3.88	0.93
I would have between 4-14 sessions with the therapist.	3.40	0.87
I would meet with the therapist for one hour each week.	3.59	0.83
I would have each session with the therapist as a structured time, meaning that there are definite things we would do each week.	3.44	0.99
I would answer the therapist's questions to help figure out why I feel or think certain things.	4.27	0.69
I would answer the therapist's challenges to my thoughts.	4.09	0.75
I would act as though my therapist's and my ideas are equally important.	3.93	0.85
I would be the only one in therapy; my family or friends do not come.	3.58	1.20



Table 2 cont.

I would need to talk a lot about my thoughts.	4.16	0.74
I would need to talk a lot about my feelings.	4.14	0.85
I would be asked to describe a situation in a lot of detail so I could identify specific thoughts or feelings I had during that situation.	3.95	0.78
I would have a very active role in whether I feel better.	4.43	0.62
I would focus on learning how thoughts cause feelings.	3.89	0.85
I would answer the therapist's direct questions.	4.07	0.75
I would be directed to do some activities (example: therapist might ask me to go walking three times a week) rather than just talking.	3.88	0.82
I would complete paperwork each week.	3.07	0.97

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Note: Items were rated according to a scale where 1 = Disagree Strongly and 5 = Agree Strongly

Table 3. CBT-AS Mean Interitem Correlations.

	CBT_1	CBT_2	CBT_3	CBT_4	CBT_5	CBT_6	CBT_7	CBT_8	CBT_9	CBT_10	CBT_11	CBT_12
CBT_1												
CBT_2	.050											
CBT_3	.204	.431										
CBT_4	.065	.323	.491									
CBT_5	.148	.144	.295	.388								
CBT_6	.329	.082	.150	.134	.234							
CBT_7	.300	.148	.248	.232	.422	.294						
CBT_8	-.058	-.100	-.053	-.025	.032	.056	.086					
CBT_9	.169	-.018	-.015	.010	.015	.187	.099	.171				
CBT_10	.058	.111	.095	.165	.170	.029	.235	.166	.187			
CBT_11	.177	.137	.134	.146	.214	.209	.173	.132	.026	.474		
CBT_12	-.031	.109	.130	.175	.245	.124	.281	.122	-.003	.305	.291	
CBT_13	.239	.240	.244	.177	.227	.315	.269	.025	.148	.180	.265	.256
CBT_14	.191	.166	.199	.202	.177	.284	.366	.048	.119	.222	.307	.233
CBT_15	-.002	.213	.270	.300	.234	.092	.188	.083	.145	.197	.148	.273
CBT_16	-.075	.006	-.042	.029	-.031	.060	-.052	.266	.081	.197	.188	.008
CBT_17	.467	.031	.191	.119	.128	.399	.307	-.019	.158	.035	.165	.097
CBT_18	.477	.061	.242	.140	.111	.356	.276	-.032	.153	.081	.142	.027
CBT_19	.308	.047	.125	.088	.197	.288	.301	.106	.259	.178	.189	.194
CBT_20	.277	.112	.211	.142	.075	.288	.216	.074	.356	.030	.118	-.022
CBT_21	.222	-.034	.073	.090	.122	.219	.379	.098	.369	.283	.153	.151
CBT_22	.213	.132	.179	.186	.229	.227	.325	.129	.219	.160	.161	.216
CBT_23	.089	.081	.137	.269	.233	.158	.225	.167	.223	.262	.172	.322
CBT_24	.067	-.001	.016	.156	.387	.085	.319	.217	.079	.336	.197	.387



Table 3 cont.

	CBT_13	CBT_14	CBT_15	CBT_16	CBT_17	CBT_18	CBT_19	CBT_20	CBT_21	CBT_22	CBT_23	CBT_24
CBT_1												
CBT_2												
CBT_3												
CBT_4												
CBT_5												
CBT_6												
CBT_7												
CBT_8												
CBT_9												
CBT_10												
CBT_11												
CBT_12												
CBT_13												
CBT_14	.616											
CBT_15	.263	.324										
CBT_16	.116	.133	.101									
CBT_17	.287	.276	.140	.126								
CBT_18	.241	.228	.077	.029	.661							
CBT_19	.286	.340	.254	.163	.451	.420						
CBT_20	.350	.326	.177	.022	.285	.182	.348					
CBT_21	.191	.301	.223	.064	.295	.249	.428	.284				
CBT_22	.532	.521	.322	.213	.201	.212	.261	.298	.376			
CBT_23	.352	.256	.265	.033	.145	.188	.290	.128	.200	.346		
CBT_24	.188	.140	.209	.044	.135	.125	.218	-.049	.234	.198	.448	

### *Exploratory factor analysis*

A principal components analysis with a varimax rotation was performed on the CBT-AS items to investigate its factor analytic properties and construct appropriate subscales. Based upon the scree plot (see Figure 1), three factors with eigenvalues greater than one were chosen.

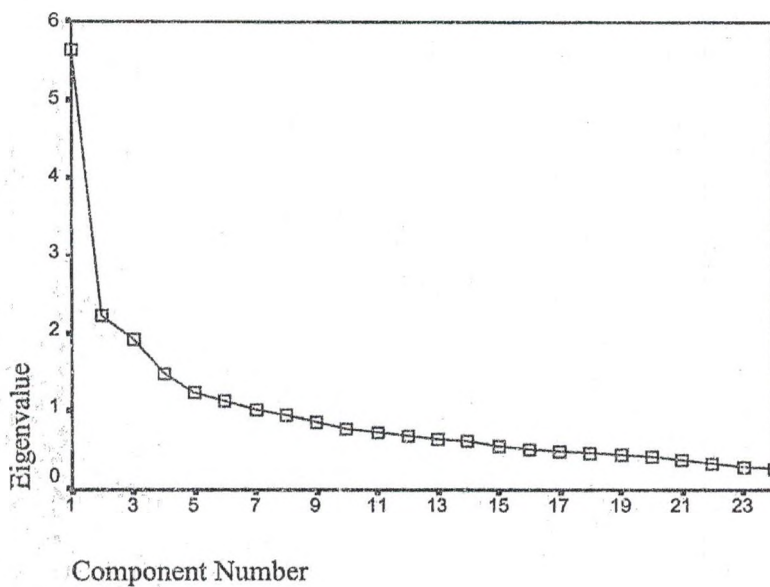


Figure 1. CBT-AS total variance scree plot.

Results from the rotated component matrix for factors one through three are presented in Table 4.



Table 4. Rotated Factor Matrix for the CBT-AS.

Item	Factors		
	<u>Focused In-Session Behavior</u>	<u>Active Stance</u>	<u>Structured Therapeutic Relationship</u>
CBT_1	<b>.70</b>		
CBT_2			<b>.18</b>
CBT_3	<b>.21</b>		
CBT_4		<b>.27</b>	
CBT_5	<b>.17</b>	<b>.58</b>	
CBT_6	<b>.56</b>		<b>.26</b>
CBT_7	<b>.34</b>	<b>.47</b>	<b>.19</b>
CBT_8		<b>.24</b>	
CBT_9			
CBT_10		<b>.28</b>	
CBT_11	<b>.18</b>		<b>.18</b>
CBT_12		<b>.59</b>	<b>.25</b>
CBT_13	<b>.22</b>	<b>.14</b>	<b>.80</b>
CBT_14	<b>.19</b>	<b>.11</b>	<b>.78</b>
CBT_15		<b>.30</b>	<b>.31</b>
CBT_16		<b>-.12</b>	<b>.16</b>
CBT_17	<b>.83</b>		<b>.12</b>
CBT_18	<b>.82</b>		
CBT_19	<b>.51</b>	<b>.22</b>	<b>.19</b>
CBT_20	<b>.25</b>	<b>-.18</b>	<b>.36</b>
CBT_21	<b>.24</b>	<b>.24</b>	<b>.15</b>
CBT_22	<b>.13</b>	<b>.23</b>	<b>.70</b>
CBT_23		<b>.60</b>	<b>.26</b>
CBT_24		<b>.80</b>	

Note: Boldface numbers denote on which factor the item loaded.

Based upon the factor loadings, Factor One was composed of CBT-AS items 1, 3, 6, 17, 18, 19, and 21. Factor Two was composed of items 4, 5, 7, 8, 10, 12, 23, and 24. Finally, Factor Three was composed of items 2, 11, 13, 14, 15, 16, 20, and 22. Item 9 was the only question that was not included in the next phase of the study, as it did not load on any of these factors. Based on the content of the items that loaded on these factors, Factor One was termed "Focused In-Session Behavior," Factor Two was termed

“Active Stance,” and Factor Three was termed “Structured Therapeutic Relationship.”

The resultant CBT-AS instrument that was utilized in the next phase of this study is included in Appendix L.

#### Study Two: Cross-Cultural Examination of Depressotypic Cognitions and CBT Applicability

The 41 American Indian individuals reported a mean BDI-II score of 10.71 ( $SD = 11.36$ ), whereas the mean score for the 41 Caucasian individuals was 9.80 ( $SD = 7.14$ ). This difference in BDI-II scores was not statistically significant,  $t(1, 80) = 0.43, p = .67$ . Therefore, in subsequent analyses significant group differences could not be attributable to pre-existing differential levels of depressive symptomatology.

#### *Analysis of depressotypic cognitions*

The number of irrational-depressed responses on the CRT, EASQ generality scores (i.e., the average of the stability and globality subscales), and CCL-Depressed scale scores were computed and used as indices of depressotypic cognitions in subsequent analyses. Descriptive data for these cognitive measures are presented in Table 5.



Table 5. Descriptive Data for the Cognitive Measures.

Group	Measure	Mean	SD	Min	Max
American Indian (N = 41)	CRT-ID	6.60	3.37	1.00	13.00
	EASQ-G	3.65	0.85	2.17	5.50
	CCL-D	12.27	12.61	0.00	57.00
Caucasian (N = 41)	CRT-ID	7.80	4.15	2.00	17.00
	EASQ-G	3.74	0.80	1.25	6.04
	CCL-D	19.02	13.31	0.00	54.00

Note: CRT-ID = Cognitive Response Test-Irrational Depressed, EASQ-G = Extended Attributional Style Questionnaire Generality, and CCL-D = Cognition Checklist Depressed

A discriminant analysis was conducted to determine if there were differences between the American Indian and Caucasian groups on the three cognitive measures. The overall Wilks' lambda was not significant,  $\Lambda = .93$ ,  $X^2(3, N = 82) = 5.35$ ,  $p = .15$ , indicating that the predictors did not differentiate between the two groups.

In Table 6, the within-groups correlations between the predictors and the discriminant function, as well as the standardized weights, are presented.

Table 6. Standardized Coefficients and Correlations of the Cognitive Measures.

	Correlation coefficients with discriminant function 1	Standardized coefficients for discriminant function 1
CCL-Depressed	.98	.21
CRT-ID	.59	-.11
EASQ	.20	.91

Note: CRT-ID = Cognitive Response Test-Irrational Depressed, EASQ-G = Extended Attributional Style Questionnaire Generality, and CCL-D = Cognition Checklist Depressed

Based on these coefficients, the CCL-Depressed scores demonstrate the strongest relation with the discriminant function. This function was able to classify correctly 58.5% of the participants. In order to account for chance agreement, a kappa coefficient

was calculated at a value of .17, a non-significant prediction value that is only slightly greater than chance alone. To assess how well the classification procedure would predict in a new sample, the leave-one-out technique (cf. Green et al., 2000) was employed. The percent of individuals accurately classified was 56.1%. These results suggest the discriminant analysis model was not significantly better than chance alone at correctly classifying Caucasian and American Indian participants.

#### *Analysis of CBT applicability*

Scores on the Focused In-Session Behavior scale of the CBT-AS (CBT-AS1), Active Stance scale (CBT-AS2), and Structured Therapeutic Relationship scale (CBT-AS3) were used as the predictors in a discriminant analysis procedure to determine if there were differences between the American Indian and Caucasian participants in terms of CBT applicability. Descriptive data for the CBT-AS factor scale scores are presented in Table 7. The means of each CBT-AS item for American Indians and Caucasians are presented in Table 8.

Table 7. Descriptive Data for the CBT-AS Scores.

Group	Measure	Mean	SD	Min	Max
American Indian (N = 41)	CBT-AS1	26.32	7.10	7.00	35.00
	CBT-AS2	27.83	7.21	8.00	40.00
	CBT-AS3	28.93	7.71	8.00	40.00
Caucasian (N = 41)	CBT-AS1	31.00	3.18	24.00	35.00
	CBT-AS2	29.56	4.33	19.00	40.00
	CBT-AS3	33.83	3.71	26.00	40.00

Note: CBT-AS1 = Focused In-Session Behavior, CBT-AS2 = Active Stance, and CBT-AS3 = Structured Therapeutic Relationship



Table 8. Means for CBT-AS Items by Ethnicity.

Group	CBT-AS Item	Mean	SD
American Indian	1	3.85	1.09
Caucasian		4.32	0.91
American Indian	2	3.83	1.45
Caucasian		4.56	0.74
American Indian	3	3.78	1.39
Caucasian		4.61	0.59
American Indian	4	3.66	1.35
Caucasian		4.24	0.83
American Indian	5	3.49	1.08
Caucasian		3.83	1.12
American Indian	6	4.05	1.16
Caucasian		4.56	0.63
American Indian	7	3.78	1.31
Caucasian		4.54	0.74
American Indian	8	3.32	1.46
Caucasian		2.83	1.20
American Indian	9	3.41	1.36
Caucasian		3.46	1.25
American Indian	10	3.29	1.36
Caucasian		3.22	1.17
American Indian	11	3.24	1.45
Caucasian		3.95	0.97
American Indian	12	3.39	1.34
Caucasian		3.63	1.07
American Indian	13	3.73	1.36
Caucasian		4.41	0.81
American Indian	14	3.54	1.27
Caucasian		4.46	0.63

Table 8.cont.

American Indian	15	3.44	1.36
Caucasian		3.93	0.93
American Indian	16	2.93	1.33
Caucasian		3.41	1.40
American Indian	17	3.83	1.73
Caucasian		4.46	0.67
American Indian	18	3.54	1.50
Caucasian		4.54	0.67
American Indian	19	3.41	1.38
Caucasian		4.10	0.86
American Indian	20	4.24	1.59
Caucasian		4.61	0.67
American Indian	21	3.85	1.22
Caucasian		4.41	0.67
American Indian	22	3.98	1.11
Caucasian		4.49	0.74
American Indian	23	3.73	1.25
Caucasian		3.93	0.98
American Indian	24	3.17	1.34
Caucasian		3.34	1.06

Note: Items were rated according to a scale where 1 = Disagree Strongly and 5 = Agree Strongly

The overall Wilks' lambda was significant,  $\Lambda = .79$ ,  $X^2(3, N = 82) = 18.74$ ,  $p < .001$ , indicating that the predictors were able to differentiate between the two groups. The within-groups correlations between the predictors and the discriminant function, as well as the standardized weights, are given in Table 9.



Table 9. Standardized Coefficients and Correlations of CBT-AS Scores.

	Correlation coefficients with discriminant function 1	Standardized coefficients for discriminant function 1
CBT-AS1	.83	.80
CBT-AS2	.28	-.72
CBT-AS3	.79	.69

Based on these coefficients, scale one of the CBT-AS shows the strongest relation with the function, although scale three also shows a strong relation. CBT-AS2 shows the weakest relation with the function. Based on the contents of the items in CBT-AS1 and CBT-AS3, this function may be labeled CBT structured behavior and relationship. The means on the discriminant function are consistent with this interpretation. The Caucasians had higher mean scores ( $\bar{M} = 0.51$ ) than the American Indians ( $\bar{M} = 0-.51$ ) on the CBT structured behavior and relation dimension.

This function was able to classify correctly 72.0% of the individuals. In order to account for chance agreement, a kappa coefficient was computed to be .44, a moderate value that is statistically greater than chance ( $p < .01$ ). To assess how well the classification procedure would predict in a new sample, the leave-one-out technique was employed. The percent of individuals accurately classified was 69.5%.

#### *Determining the Effects of Assimilation*

A cultural affiliation measure was obtained for the American Indian participants using total scores for the American Indian probe items from the Orthogonal Cultural Identification Scale (OCIS). Higher numbers on the OCIS indicate the individual is "more assimilated," or less traditionally Indian. The American Indian participants' mean score was 8.55 ( $SD = 3.36$ ); scores ranged from 6 to 16. Based on the frequency distribution of the sample, a mean split was utilized such that persons with OCIS scores

between 6 and 8 would be considered "low in cultural assimilation," or more traditional (N = 12). Persons with OCIS scores with 9 and above were considered "high in assimilation," or less traditional (N = 26). Descriptive and inferential data for the American Indian participants according to their assimilation status are presented in Table 10.

#### *Assimilation and Depressotypic Cognitions*

Another discriminant analysis was performed using the cognitive measures as predictors; however, in this procedure, the dependent variables were the Caucasian individuals, the "high assimilated" American Indians, and the "low assimilated" American Indians. Again, the overall Wilks' lambda was not significant,  $\Lambda = .87$ ,  $X^2(3, N = 79) = 10.73$ ,  $p = .10$ , indicating that the predictors did not differentiate among the three groups.

In Table 11, the within-groups correlations between the predictors and the discriminant function, as well as the standardized weights, are presented.



Table 10. Descriptive Data and Independent Samples t-tests for American Indian Participants According to Assimilation Status.

Variable	Assimilation Group	Mean	SD	t	p
Age	High	34.73	12.20	-0.00	.98
	Low	34.75	13.40		
CRT Depressed	High	5.92	3.50	-2.15	.04
	Low	8.42	2.87		
Mom SES	High	42.64	9.47	1.69	.11
	Low	33.75	8.42		
Dad SES	High	38.27	15.80	-0.45	.66
	Low	41.71	15.72		
EASQ Generality	High	3.60	.96	-0.62	.54
	Low	3.79	.70		
CCL-Depressed	High	9.27	8.49	-1.50	.14
	Low	15.33	16.59		
CBT-AS1	High	25.23	6.94	-1.01	.32
	Low	27.75	7.50		
CBT-AS2	High	27.62	7.40	-0.18	.86
	Low	28.08	7.33		
CBT-AS3	High	28.15	7.73	-0.61	.54
	Low	29.83	8.07		
BDI-II	High	9.77	10.92	-0.34	.74
	Low	11.08	11.95		

Note: CRT Depressed = Cognitive Response Test Irrational-Depressed, SES = Hollingshead Socioeconomic Status Index, EASQ Generality = Extended Attributional Style Questionnaire, CCL-Depressed = Cognition Checklist Depressed, CBT-AS1 = Focused In-Session Behavior, CBT-AS2 = Active Stance, and CBT-AS3 = Structured Therapeutic Relationship

Table 11. Standardized Coefficients and Correlations of the Cognitive Measures Incorporating Assimilation Status.

	Correlation coefficients with discriminant function 1	Standardized coefficients for discriminant function 1
CCL-Depressed	.97	.86
CRT	.66	.29
EASQ	.22	-.10

Although not significant, these results suggest that CCL scores have the strongest relation with the function. This function was able to classify the participants' ethnic group and affiliation status with an accuracy rate of 41.8%. The non-significant kappa coefficient was .11, suggesting that this model is only able to predict group membership slightly better than chance. In a different sample of similar individuals, this function would accurately classify 38% of individuals, according to the results of the leave-one-out technique.

#### *Assimilation and CBT Applicability*

An additional discriminant analysis procedure was conducted to examine the ability of the CBT-AS subscales to predict membership in the three groups: Caucasians, high-assimilated American Indians, and low-assimilated American Indians. The overall Wilks' lambda was significant,  $\Lambda = .74$ ,  $X^2(3, N = 79) = 22.50$ ,  $p < .001$ , indicating that the predictors were able to differentiate between the three groups. The residual Wilks' lambda was not significant,  $\Lambda = 1.0$ ,  $X^2(3, N = 79) = .38$ ,  $p = .83$ , indicating that the predictors could not differentiate significantly among the three groups after partialling out the effects of the first discriminant function. Because only the first test was significant, only the first discriminant function was interpreted. The within-groups correlations between the predictors and the discriminant function, as well as the standardized weights, are given in Table 12.



Table 12. Standardized Coefficients and Correlations of CBT-AS Scores Incorporating Assimilation Status.

	Correlation coefficients with discriminant function 1	Standardized coefficients for discriminant function 1
CBT-AS1	.84	.89
CBT-AS2	.26	-.73
CBT-AS3	.76	.59

Similar to previous results, these coefficients indicate that scale one of the CBT-AS shows the strongest relation with the function, although scale three also shows a strong relation. Again, CBT-AS2 shows the weakest relation with the function. Based on the contents of the items in CBT-AS1 and CBT-AS3, this function may again be labeled CBT structured behavior and relationship. The means on the discriminant function are also consistent with this interpretation. The Caucasians had higher mean scores ( $\bar{M} = .53$ ) than the high-assimilated American Indians ( $\bar{M} = -.22$ ), who in turn had higher mean scores than the low-assimilated American Indians ( $\bar{M} = -.74$ ) on the CBT structured behavior and relationship dimension.

This function was able to correctly categorize 59.5% of the individuals into one of the three groups. In order to account for chance agreement in this prediction, a kappa coefficient was calculated at a value of .35, a modest value that is statistically greater than chance ( $p < .01$ ). To assess how well the classification procedure would predict in a new sample, the leave-one-out technique was employed. The percent of individuals accurately classified was 53.2%.

*Assimilation status and similarity to Caucasian individuals*

A follow-up univariate one-way analysis of variance (ANOVA) was conducted to determine if the three groups would perform differently on the cognitive measures (CCL-Depressed, EASQ Generality, and CRT Irrational Depressed) and on the three CBT-AS scales. Results are presented in Table 13. The data indicate that the three groups have significantly different scores on the CCL-Depressed scale, CBT-AS1- Focused In-Session Behavior scale, and CBT-AS3- Structured Therapeutic Relationship scale.

For significant outcomes, a Post-Hoc Tukey HSD analysis was conducted to further understand how the three groups varied. The low-assimilated American Indian individuals scored differently than Caucasian individuals on the CCL-Depressed Scale ( $p < .008$ ), the CBT-AS1 ( $p < .001$ ), and the CBT-AS3 ( $p < .001$ ). In contrast, there were no significant differences between the high-assimilated American Indian individuals and individuals in either of the other two groups. These results suggest that the more assimilated American Indian individuals were more similar to the Caucasian individuals than the lesser assimilated American Indians, in terms of both depressotypic cognitions and CBT suitability.



Table 13. ANOVA Results for Caucasians and American Indians With High and Low Cultural Assimilation.

		<u>Sum of Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
CCL-D	Between Groups	1514.18	2	757.09	4.704	.012
	Within Groups	12232.76	76	160.96		
	Total	13746.94	78			
CBT-AS1	Between Groups	539.97	2	269.99	9.214	.000
	Within Groups	2226.87	76	29.30		
	Total	2766.84	78			
CBT-AS2	Between Groups	65.54	2	32.77	.919	.403
	Within Groups	2709.17	76	35.65		
	Total	2774.71	78			
CBT-AS3	Between Groups	545.22	2	272.61	7.504	.001
	Within Groups	2760.86	76	36.33		
	Total	3306.08	78			
EASQ- G	Between Groups	.43	2	.21	.301	.741
	Within Groups	53.61	76	.71		
	Total	54.04	78			
CRT- D	Between Groups	74.67	2	37.34	2.610	.080
	Within Groups	1087.20	76	14.31		
	Total	1161.87	78			

Note: CCL-D = Cognition Checklist Depressed, CBT-AS1 = Focused In-Session Behavior, CBT-AS2 = Active Stance, CBT-AS3 = Structured Therapeutic Relationship, EASQ-G = Extended Attributional Style Questionnaire, and CRT-D = Cognitive Response Test Irrational-Depressed.

## CHAPTER IV

### DISCUSSION

The purpose of the present study was twofold: (a) to compare the applicability of CBT approaches and assumptions in Caucasians and American Indians, and (b) to evaluate whether depressotypic cognitions are equally prevalent in both groups. An applicability scale for CBT, the Cognitive Behavioral Applicability Scale (CBT-AS), was constructed to explore the first aim of the study. To assess the generalizability of depressotypic cognitions, results from a variety of cognitive measures were compared between groups.

Before proceeding with the discussion, several caveats should be mentioned. The present study utilized community convenience samples of Caucasians and predominantly Northern Plains American Indians. Therefore, the following interpretations may not apply to clinical patients or generalize to other groups of American Indian individuals. In addition, results are described in terms of statistical significance; whether these differences translate into clinical significance remains to be determined. Finally, characteristics of CBT were assessed in terms of how much participants agreed with certain statements regarding the hypothetical provision of therapy. How participants actually respond to psychotherapy may only be established through longitudinal treatment outcome studies.

The discussion is organized according to the following format. First, the findings from study one, including the psychometric properties and potential utility of the CBT-



AS, are described. Next, results from the comparison of CBT applicability and depressotypic cognitions are given, corresponding to study two. Future areas of study are then proposed. In addition, implications of the present findings will be described in the following sections, beginning with an analysis of the instrument developed to measure CBT applicability, the CBT-AS.

#### Psychometric Properties and Future Applications of the CBT-AS

Before the applicability of CBT could be compared between Caucasians and American Indians, it was necessary to develop an instrument to measure the preference for constructs inherent in a CBT approach. The extracted factor structure and reliability data of the CBT-AS provide preliminary evidence that the instrument is a conceptually meaningful and psychometrically sound measure. Three factor scales were derived: active stance, structured therapeutic relationship, and focused in-session behavior. Although the factor analytic findings of the CBT-AS were not cross-validated on a new sample of individuals, the significant effects found using the measure argue for the utility of the factor solutions obtained herein. CBT-AS factor scale scores were able to discriminate between the two cultural groups, as will be described in the subsequent section.

The CBT-AS has potential utility as an instrument to be employed in future studies assessing CBT's cross-cultural acceptability. It may be administered to individuals from various minority groups to determine the professed suitability of three domains of CBT. In addition to utilizing the CBT with multicultural populations, measuring pre-therapy attitudes about CBT characteristics might also assist clinicians seeking to match clients to the most effective treatment paradigms. Safran and Segal

(1996) argued that providing CBT to individuals who met certain selection criteria and indicated a preference for the therapeutic style of CBT would optimize client, therapist, and clinic resources. Future research may address whether differences in CBT-AS scores are indeed related to treatment outcome.

#### Cross-Cultural CBT Applicability

It was hypothesized that Caucasian individuals would have higher scores on the CBT-AS than American Indian individuals, indicating that Caucasians would rate the characteristics of CBT as more suitable than American Indians. Consistent with expectations, Caucasian participants rated the focused in-session behavior and structured therapeutic relationship scales of the CBT-AS as more desirable than American Indian participants. This finding is in line with Fiferman's (1989) results, which indicated that traditional Native individuals rated client-centered and Native American therapy as the treatments of choice, whereas Caucasian individuals rated cognitive therapy as the most acceptable.

Results from the CBT-AS allow for an examination of what specific CBT components may be particularly acceptable to American Indians. The Caucasian group rated the focused in-session behavior scale as more appealing than the American Indian group. This factor scale contains items that specifically target CBT components outlined by Beck (1995) in which the therapist encourages the client to uncover the relation between thoughts and feelings, vis á vis the client's specific problems. The specific, linear, and focused behavior in the therapy session that is part of CBT could be unappealing to a Native culture that is traditionally less goal-directed than Anglo-American culture. In their article addressing the provision of mental health services in a



reservation setting, Tyler, Cohen, and Clark (1982) noted that majority culture members tend to explain behavior by emphasizing a linear, logical approach. In contrast, Native individuals tend to explain behavior in terms of harmony with a natural order. Whether such value differences affect treatment outcome would be a promising area of future research.

The second CBT-AS factor scale, active stance, was rated as similarly acceptable by both American Indians and Caucasians. This scale measures the respondent's professed attraction toward active participation both in and out of session. The items on this factor scale relate to therapeutic tasks, such as activity scheduling and homework completion. The items also reflect the time-limited nature and present-time orientation of CBT. The mutual acceptability of the active stance domain of CBT between both American Indian and Caucasian participants is consistent with the assertion that a present time (Casas, 1988) and action orientation (Renfrey, 1992) is especially appealing to minority and American Indian clients. This finding is consistent with observations by various clinicians (e.g., Hays, 1995) that these particular aspects of CBT might make it a viable therapeutic approach for minority individuals.

Finally, a structured therapeutic relationship was rated as more desirable by Caucasians than American Indians. Some of the items on this factor scale were constructed to represent a client's acceptance of personal responsibility for change (cf. Safran & Segal, 1996). The differential levels of desirability for personal agency is not be surprising given traditional Native beliefs of interdependence (Dillard & Manson, 2000). Other items on the structured therapeutic relationship scale pertain to the limited, business-oriented relationship between the therapist and client within the CBT paradigm.

This relatively structured and restricted professional relationship between patient and healer may be a foreign concept to many American Indians. For example, it is at times necessary for the clinician to conduct therapy sessions at the client's home in the provision of psychotherapy in a rural setting (Willis, Dobrec, & Bigfoot Sipes, 1992). Making home visits is not something that majority culture members typically associate with psychotherapy. In addition, American Indians have long had their own mental health services in the form of spirit healers, medicine people, friends, and kin (Trimble & Fleming, 1989), community members usually well-known to the client outside of a service role. The conventional discrete therapeutic relationship espoused in majority culture may violate Natives' historical expectations of the healing relationship.

Often these value differences between American Indians and majority culture members are related to varying levels of acculturation (McDonald et al., 1993). Fiferman (1989) found that the Caucasian and more acculturated American Indian college students similarly rated cognitive therapy as their treatment of choice when presented with the choices of cognitive, behavioral, client-centered, and traditional Native American therapy. In contrast, more traditional Native students chose traditional Native American therapy as their preferred treatment modality.

When the current sample was divided into high and low assimilation status on the basis of a mean split on OCIS scores, comparable results were obtained. Specifically, a one-way ANOVA confirmed that significant differences on the CBT-AS factor scales one and three were due to significant differences between Caucasians and more traditional American Indians. The more acculturated American Indians did not differ significantly from the Caucasians on any of the CBT-AS scales. This suggests that



highly assimilated Native individuals may respond similarly to Caucasians regarding their preferences for characteristics of CBT. Thus, future research might determine the degree to which treatment modifications should be implemented as a function of acculturation. This finding also underscores the importance of therapists' need to assess acculturation status in their clients.

The therapist's expectations for a CBT client are that s/he be dedicated, active, capable of logical abstraction, and able to articulate thoughts and feelings (Safran and Segal, 1996). Kaiser, Katz and Shaw (1998) noted that American Indians may demonstrate an external locus of control in problem-solving, which could come across as passivity or treatment noncompliance to a naïve clinician. The potentially negative interpretation of such an observation might be averted if the clinician is able to implement a more culturally appropriate type of CBT. Significant results from the CBT-AS factor scale structured therapeutic relationship suggest that a non-clinical sample of American Indian individuals may prefer a therapy where personal agency is not emphasized, at least as compared to the sample of Caucasian individuals in this study.

In sum, both American Indians and Caucasians indicated a preference for therapy that was focused on the present and emphasized active tasks such as homework completion. However, Caucasians rated a structured therapeutic relationship between the patient and clinician as more desirable than American Indians. Caucasians also indicated a stronger preference for personal responsibility for change and cause-and-effect analyses of thoughts and emotions. These findings are consistent with previous literature regarding the provision of mental health services to American Indian clients.

### Cultural Generalizability of Depressotypic Cognitions

It was predicted that scores on the cognitive measures, (i.e., EASQ, CCL, and CRT) would discriminate between the two cultural groups. Contrary to expectation, a discriminant analysis procedure detected no significant differences between non-depressed American Indians and Caucasians on the CRT, CCL, and EASQ scores. Depression scores were not included in the analyses because there was no significant difference between Caucasians and American Indians in BDI-II scores.

This result is similar to Kunde's (1985) finding that the original Automatic Thoughts Questionnaire (ATQ; Hollon & Kendall, 1980) was a better indicator of depressive cognitions in American Indians than a specially-formulated version designed specifically for use with a Native population. It had been hypothesized that the instruments used herein, specifically the CRT with its "projective" nature, would capture cultural differences that were not apparent using self-report measures such as the ATQ. However, even when the participants were allowed to respond in an open-ended format that was not limited to a forced-choice response, no statistically significant differences in depressotypic cognitions were found.

The potential generalizability of such cognitions between cultures has important implications for the assessment of depression in minority groups. Dinges, Atlis, and Ragan (2000) articulated how overall differences in ways of thinking about the world could affect the assessment of depression. They suggested that sociocentric views emphasize interdependence with individual interests subordinated to the good of the group, whereas egocentric views emphasize autonomy and internal attributes. Dinges and colleagues proposed that these value differences may lead to errors in assessing



major depressive disorder. Specifically, depression viewed from an egocentric perspective is located within the self and is focused on the individual. In contrast, depression viewed from a sociocentric perspective would involve understanding the client in terms of his/her social status, roles, and obligations. The present finding that the nature of depressotypic cognitions is similar between Caucasians, who are typically defined as an egocentric group, and American Indians, who are typically defined as a sociocentric group, provide evidence contrary to Dinges et al.'s assertions. Even though the present sample included non-depressed individuals, the participants in this study did not demonstrate significantly different attributional styles or variations in thinking patterns that are typical of depression.

Fortunately, researchers like Dinges and colleagues have begun to address these important considerations in the assessment of depression in American Indians. However, little is known about the generalizability of standardized instruments such as the CRT, EASQ and CCL (Rush, 1987). The present findings provide preliminary evidence that these questionnaires may yield similar results in American Indian samples as in Caucasian samples. This offers some tentative support for clinicians to administer these measures as an index of pre-morbid depressive-type thinking, as a tool to relate current depressive symptomatology to "dysfunctional" cognitions, and as a marker of treatment progress. Prior to the current examination of these measures in an American Indian population, researchers could not have been certain that a reduction in these instruments' scores reflected an improvement in depressotypic cognitions or an artifact of cultural non-applicability.

A second discriminant analysis was performed to determine if Caucasians, high-assimilated American Indians, and low-assimilated American Indians would differ in terms of depressotypic cognitions. Again, the results were not significant. However, a follow-up ANOVA showed that American Indians who were less assimilated, according to a mean split on OCIS scores, had significantly different CCL-Depressed scores than Caucasians. Interestingly, the less assimilated group endorsed more cognitions typical of depression and had higher BDI-II scores than the more assimilated group, suggesting that the significant difference between these two groups accurately reflected an across-group difference in depressive symptomatology and corresponding depressotypic thinking, rather than a difference in cognitive style.

This study found that depressotypic cognitions were similar in the present samples of non-depressed American Indians and Caucasians. Whether this similarity would remain in depressed patients or in other groups of American Indians and Caucasians remains to be determined. However, the relatively high prevalence rate of depression among Native individuals compared to Caucasian individuals (e.g., Manson et al., 1985) may be more related to sociocultural factors, such as poverty and community/sociological stressors, than to general cognitive style. One Indian Health Service study found that the current relationship of many Natives with the American government has fostered a sense of dependency which has deleteriously impacted emotional and social maturational processes, self-image, and cultural organization, thereby contributing to the development of depression (Townesley & Goldstein, 1977). This suggests the differential prevalence rates of depression are not related to ethnic differences, but rather sociological disparities. Depression, then, may be a natural



sequelae to living conditions endured by some Native individuals (T. Makowski, personal communication, June, 2003).

### Limitations

Several limitations of this study must be acknowledged. The participants were community members recruited from a pow-wow, a blues festival, and through radio and newspaper advertisements. Thus, there may be a selection bias in this sample given the self-referral nature of the population. Another limitation of the sample is that the American Indian participants were largely from Northern Plains tribes, so it is not possible to conclude that these results apply to American Indians in general. Furthermore, even among Northern Plains Indians, individual differences must be taken into account.

An additional consideration is the comparability of the two cultural samples. An indeterminable number of psychosocial and biological factors may limit the comparability of a pow-wow sample of American Indians with Caucasians recruited through other community resources. This comparability of samples in terms of distress and disability, diagnosis, demographic and social characteristics, and manner of recruiting is one that plagues the multicultural research community as a whole (Draguns, 1995). Nonetheless, extensive efforts were made to maximize the similarity of these two groups: they were matched on age and gender, no differences were found on socioeconomic status or depressive symptomatology, and a community-sponsored music festival is one of the few Anglo-American traditions that might be compared to an American Indian pow-wow.

It is also important to take into account that depressotypic cognitions were found to be generalizable in a non-clinical population. Perhaps cross-cultural differences in depressive thinking are found only in individuals with clinical levels of depressive symptomatology. It may be that euthymic individuals exhibit similar attributional styles and cognitive interpretations cross-culturally, but depressed individuals show cultural variability in the manifestation of dysfunctional cognitions. Future research that utilizes individuals selected on the basis of current pathology may begin to address this issue.

In order to rule out pre-existing differential levels of pathology between the two groups, the BDI-II was administered as a measure of depressive symptomatology. There are concerns with its usage in a cross-cultural study, as the construct of "depression" was only defined in terms of how the BDI-II measures it. However, the BDI-II (e.g., Porter, Zvolensky, & McNeil, 2001) and BDI (e.g., Kunde, 1985) have been used in other studies involving American Indian participants. In fact, the BDI is one of the few self-report measures of depression that has been used effectively in multiple cultures (Marsella, Sartorius, Jablensky, & Fenton, 1985).

Another limitation involves the utilization of self-report measures in this study. It is possible that the participants indicated various preferences on paper, but would react in a different way interpersonally. This might be particularly problematic with the American Indian participants, as some clinicians have suggested that these individuals sometimes agree with the therapist, then behave differently outside of the session (Swinomish Tribal Mental Health Project, 1991). Thus, demand characteristics may be especially salient in this group.



Finally, results from the CBT-AS administration and previous literature (e.g., Renfrey, 1992) suggest that certain aspects of CBT could be modified to maximize cultural acceptability to American Indian clients. Although cross-cultural researchers have urged that clinicians should modify CBT when they are working with minority clients, modified versions may not be equivalent to the formulation to which controlled treatment outcome studies adhere. The efficacy of CBT in the treatment of depression may then have to be re-validated in these populations.

On the other hand, component analyses of the specific mechanisms by which CBT elicits therapeutic improvement have only begun to be examined. Altering certain characteristics of CBT to make the approach more applicable for American Indians may not decrease CBT's effectiveness. For instance, Jacobson and colleagues (1996) found that behavioral activation alone was as efficacious as the combination of behavioral activation and cognitive techniques addressing maladaptive automatic thoughts and core schemata in a sample of 152 individuals diagnosed with major depression. This equivalency in treatment gains was maintained at two-year follow-up (Gortner, Gollan, Dobson, & Jacobson, 1998). Given that American Indians rated behavioral activation components of CBT as suitable treatment maneuvers, it is possible that CBT adapted for this group will be found efficacious. Whether culturally-modified versions of CBT are "similar enough" remains to be determined.

Despite these limitations, this is one of the first studies to empirically examine the applicability of CBT characteristics as well as depressotypic cognitions in American Indians. This project also begins to address the paucity of research in the area of Native

mental health help-seeking behavior. Furthermore, this study demonstrates relatively good external validity given the size and heterogeneity of the American Indian sample.

#### Implications and Future Directions

##### *Depression in American Indians*

Future studies must evaluate whether cultural similarities in depressotypic cognitions are also found in depressed patients. In addition, future studies might also investigate an alternative mechanism by which depression is manifested in Native individuals that has yet to be explored. Clearly, there are numerous other mechanisms that may influence the course of depression that were not explored in this study. Major depressive disorder could be caused by diverse factors or expressed differently even if the nature of depressotypic cognitions is similar. For example, Shore and Manson (1981) observed that no one has proposed a biological or biopsychosocial model to account for the development of major depressive disorder in Native individuals. Manson (1995) later added that depressed mood may in fact be more likely to be expressed in the form of somatic concerns, given many American Indians' views of mind, body, and spirit. An assessment of such somatic concerns was not included in the present study.

In addition, there are wide variations in the normal expression of depressive-type symptoms among various Indian tribes. *Tawalt ye sni* or "totally discouraged," displayed among the Dakota Sioux of the Standing Rock Reservation, includes a sense of deprivation and hopelessness, an orientation toward the past, and thoughts of death (Johnson & Johnson, 1965). In contrast, the Navajo have been associated with "excessive mourning" or ghost sickness, where individuals display mild weight loss, sleep disturbances, and anhedonia (Miller & Schoenfeld, 1971). Even altered sensory



perceptions have been described as part of the depressive experience in some American Indian groups. For example, the normal grieving process for Hopi Indians may involve mourning hallucinations (Shen, 1986). Therefore, cognitions related to depression may be similar in American Indians and Caucasians, but other aspects of the disorder such as somatic concerns and grieving patterns could be different.

It should also be noted that depression, as defined in Western culture, may not be the only important consideration in evaluating psychological distress in American Indians. In O'Neill's (1993) investigation of alcoholism and depression among Natives on the Flathead Reservation, she found that the creation, maintenance, and disruption of social bonds were more important risk factors for suicidality than an inner experience of depression. This suggests that future research investigating depression in American Indians should include topics that might be just as important in the manifestation of the disorder as subjective mood ratings or depressotypic cognitions. Such topics might include substance use, physical ailments, and interpersonal factors.

#### *Utility of the CRT As an Indicator of Depressotypic Cognitions*

The CRT was included as an index of depressotypic cognitions in order to determine if there were cultural differences between American Indians and Caucasians that were not apparent using forced-choice questionnaires. The CRT has not been widely used in recent literature because it is somewhat labor-intensive in that the responses must be coded for the presence of irrational and irrational-depressed cognitions. Furthermore, no reliable coding scheme has been published, and the scale developer in fact pointed out (J.T. Watkins, personal communication, 2001) that the original scoring rules were no longer available. Therefore, the establishment of a reliable coding scheme developed as

part of this study could be an important contribution to the assessment of depression. Although not qualitatively explored here because of non-significant results, the CRT can provide rich assessment data, and perhaps the advent of a reliable coding scheme will encourage more researchers to utilize it.

#### *CBT for American Indian Clients: Future Considerations*

Trimble and LaFromboise (1985) speculated as to whether it is possible to modify conventional therapeutic techniques to make them more amenable for traditional Indian clients. The CBT-AS data, in conjunction with suggestions offered by clinicians who have provided mental health services to Native individuals, have potential ramifications for the provision of CBT. Taken together, they suggest that making certain modifications to CBT is worthy of future study, in that such modifications could improve the efficacy of CBT with American Indian clients. Therefore, the following suggestions are offered for the therapist to consider, as well for future researchers to empirically examine.

First, clinicians might limit the extent to which clients are made to label their thoughts and feelings in an abstract manner. The American Indians in this study rated talking a lot about their thoughts and feelings as less desirable than Caucasians. Dillard and Manson (2000) noted that if a Native client is asked to identify and label his/her feelings, little information may be obtained, and confusion may result. American Indians are generally not socialized to talk about their thoughts and feelings (Sue & Sue, 1999), and affect is typically expressed in terms of contextual and interpersonal difficulties (Manson, 1995; T. Makowski, personal communication, March, 2003). It is suggested that clinicians first inquire about the client's current social world, and then ask how particular difficulties may be affecting him or her in an emotional way (Dillard &



Manson, 2000). Another option may be to implement more experiential techniques to help the client discover how these constructs are related for him or her personally.

Second, linear causality and cause and effect relationships might be de-emphasized, especially with regard to the etiology of the client's depression and in terms of how the client should problem-solve solutions. Results from the study indicated that American Indians rated learning how thoughts cause feelings as a less desirable focus of therapy than Caucasians. Native individuals may conceptualize illness as an imbalance among the mind, body, and spirit, or due to spiritual causes (McDonald et al., 1993). McDonald et al. also stated that Natives tend to think holistically, rather than linearly. Rather than focusing on linear cause and effect analyses, therapists might explore the relation between events in the client's world and his or her current level of distress.

Third, the clinician may maintain CBT's stated focus on the present and emphasize logistical problem-solving or solution-focused skills. An active stance domain and focus on the present were rated as similarly acceptable by both American Indians and Caucasians. This suggestion is consistent with anecdotal reports (e.g., Tyler et al., 1982) that American Indians tend to view mental health services as more of a crisis management intervention than majority culture members. Because fewer than half of urban American Indians return after the initial contact (Sue, 1977), it is even more important to focus on the client's immediate needs.

Fourth, the clinician might be flexible regarding the time, length, and frequency of treatment sessions. Relative to Caucasian participants, American Indian participants did not agree that meeting with the therapist for one hour each week was a particularly acceptable way to conduct therapy. The overall length of therapeutic interventions with

Native individuals may differ from the standard number of CBT sessions. For example, at the Albuquerque, NM Indian Health Services Hospital the average length is three sessions (S. McArthur, personal communication, October, 2002). According to Dillard and Manson (2002), if therapists can allow for longer individual sessions on an as-needed basis (e.g., if there has been a suicide in the community), premature dropout may be prevented. Dillard and Manson also indicated that some Native individuals are not able to attend weekly consecutive sessions because they may need to first meet basic needs such as finding transportation. Furthermore, the traditional American Indian presenting for therapy may view the 50-minute therapy session scheduled for a specific time as an arbitrary constraint, as they may perceive their appointment as being "sometime today" (McDonald et al., 1993, p. 450).

Fifth, community members and family or friends might be integrated into the treatment approach, wherever appropriate. In the present study, American Indians indicated a stronger preference for including family and friends in therapy than the Caucasians did. Trimble and Fleming (1989) recommended that therapists respect the traditional social and network processes of many Indian people and involve kin members in therapy.

Sixth, personal autonomy in the change process might be minimized, and efforts to maximize whatever environmental sources of strength the client endorses should be implemented. On the CBT-AS, Caucasians agreed more with the notion that they would have a very active role in feeling better than the American Indians. This is consistent with contemporary psychological theory that an individual's problems are not due solely to that individual (Trimble & LaFromboise, 1985). Trimble and LaFromboise noted this



is especially the case with Indian clients, where contextual factors such as familial patterns, peer-group orientations, and tribal and ethnic identification are both etiological factors and important resources for treatment success.

In sum, results from the CBT-AS imply that in order to maximize CBT efficacy with American Indian clients, it may be beneficial to consider the client's preference for traditional CBT components. Based upon the American Indians' preferences found in this study as well as the treatment literature, several modifications to CBT were proposed. Future studies examining CBT outcomes with American Indian clients may begin to empirically investigate these suggestions.

#### Conclusion

Differential scores on the CBT-AS between American Indians and Caucasians imply that clinicians treating ethnic minorities may wish to carefully monitor their client's acceptability of the treatment approach and rationale they choose to implement. In fact, Parron (1982) included the lack of culturally acceptable treatment as one of the four main reasons minorities underutilize mental health services. This is important for American Indians in particular, as research has indicated that American Indian clients are more likely to terminate treatment after the first psychotherapy session than Caucasian clients (Norton, 1999). Johnson and Cameron (2001) added that not only is very little known about help-seeking behavior in this group, but also an American Indian client and majority culture therapist may have quite different ideas about the etiology of mental illness, how each should act, and how the problem should be treated. These researchers also reported that there are no mental health outcome studies of American Indians. Given the lack of information concerning the provision of psychological services to American

Indian clients, the present study is a first step toward finding effective modes of psychotherapy for this cultural group.

Contrary to expectation, the present study found that depressotypic cognitions were equally prevalent in the present samples of normal Caucasian and American Indian individuals. This is in contrast to Manson et al.'s (1985) assertion that American Indians perceive the world and each other much differently than most members of American society, at least in terms of depressotypic cognitions. Because these results were obtained in a non-clinical population, it remains to be determined whether American Indian and Caucasian patients who meet criteria for major depressive disorder would manifest differences in depressotypic cognitions. Future studies must evaluate the nature of such cognitions in depressed American Indian and Caucasian patients.

The generalizability of depressotypic cognitions also raises questions as to whether disparities in cognitive style are indeed vulnerability factors for depression that vary cross-culturally. Perhaps studies employing a longitudinal design could explore this hypothesis directly. Future research should also focus on other etiological factors posited to explain cultural differences in the development of major depressive disorder, including differences in family structure and the culturally sanctioned expression of aggression (Marsella et al., 1985).

In addition, these results point to the importance of measuring acculturation, which should be a standardized part of any research or treatment protocol involving American Indians. Findings from the present study are consistent with other researchers' assertions (e.g., LaFromboise, Coleman, & Gerton, 1993) that more assimilated American Indians have lower BDI-II scores than less assimilated American Indians. Not



only does a client's acculturation status influence depressive symptomatology, but according to results obtained using the CBT-AS, it also influences the perception of acceptable treatment paradigms.

Kunde (1985) proposed that if the content and frequency of American Indian cognitions are similar to Caucasian cognitions, then CBT should also be successful with Native individuals. Although this study has found additional support for the generalizability of depressotypic cognitions, it also provided evidence that modifying certain constructs of CBT may make it a more preferred approach for American Indian clients. Theoretically CBT could be as effective for American Indians as it has proven to be for Caucasians, since it targets depressotypic cognitions. However, in the present study the American Indian individuals agreed less with the characteristics of a CBT treatment paradigm than the Caucasian individuals. Only a strong interplay between empirical research and clinical practice can begin to address these seemingly contradictory findings.

## APPENDICES



## **Appendix A**

### **Focus Group Considerations**

The group first reviewed all the measures utilized in the study and confirmed that, in general, the instruments were appropriate to administer to American Indian participants. The group suggested that the item relating to whether participants lived on- or off-reservation, located on the demographic questionnaire, be removed, as it may be construed as culturally insensitive. One member indicated that most Indians call the reservation "home" even if they were raised in an urban setting.

The group commented that it may be necessary to explain the subtle nuances among the four similar, apparently redundant, response items on the Extended Attributional Style Questionnaire. The group also warned that participants may have difficulty distinguishing between thoughts and feelings as they respond to the Cognitive Response Test items. They indicated this was particularly salient due to the Native belief related to the interconnectedness of cognitions and emotions, rather than a separation between the two. Finally, the group provided some additional insight into cross-cultural mental health issues to consider when interpreting the results or planning future studies, such as the importance of the therapist's ethaicity.

## Appendix B

### Consent Form for CBT-AS Validation

**Introduction:** This investigation is being conducted by Lydia C. Jackson, a candidate for the doctoral degree in psychology, under the supervision of Drs. Amy Wenzel and John Tyler, who work in the psychology department here at UND.

**Project Description:** You are invited to participate in a research project evaluating the properties of a scale developed by the author.

Your participation in this project will consist of completing two questionnaires. This will take no longer than 20 minutes and will be completed immediately following receipt of this consent form.

**Risks:** There are no physical risks associated with this study; however, some of the questionnaires ask you to consider what it might be like to go for therapy. As such, for some individuals answering those questions may be difficult, and you are encouraged to speak with Lydia Jackson or you may contact Dr. Amy Wenzel at 777-4496. In addition, you may seek services at the University Counseling Center free of charge, seek services at the Psychological Services Center on a sliding scale basis, or obtain other services of your choosing. Payment for any such treatment must be provided by you or your third party payor.

**Benefits:** The benefits from this study include an increased understanding of the properties of this scale, as well as future knowledge obtained when this scale may be used with other groups of people. Immediate benefits to you include the opportunity to experience scientific research and obtain class credit for your participation.

**Confidentiality:** All information obtained in connection with your responses will be anonymous and will remain confidential. All data will be kept in a locked office for a period of three years, after which it will be destroyed. No individual responses will be reported, results will be reported only in grouped form.

**Voluntary Participation:** You are free to decide whether or not to participate. If you decide to participate, you are free to withdraw from the study at any time without fear of reprimand of any kind. Your decision of whether or not to participate will not prejudice your relations with the Psychology Department at the University of North Dakota.

**Questions:** If you have questions about the research, please call Lydia C. Jackson at 777-3803, or Dr. Amy Wenzel at 777-4496. If you have any other questions or concerns, please call the Office of Research and Program Development at 777-4279.

All of my questions have been answered, and I have been encouraged to ask any questions that I may have concerning this study in the future. I have read all of the above and willingly agree to participate in this study. I have also been provided with a copy of this consent form.

Name (please print): \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_



## Appendix C

### Demographics Questionnaire

Please answer the following brief questions.

1. Your sex (circle number of your answer).
  - 1 Male
  - 2 Female
2. Your present age: \_\_\_\_\_ Years.
3. Please describe your current religious affiliation or spiritual orientation:  
\_\_\_\_\_.
6. Please indicate your ethnic background (circle number).
  - 1 AFRICAN-AMERICAN
  - 2 ASIAN-AMERICAN
  - 3 CAUCASIAN
  - 4 HISPANIC-AMERICAN
  - 5 NATIVE AMERICAN. Tribal affiliation: \_\_\_\_\_
  - 6 OTHER (please state) \_\_\_\_\_
4. Please indicate the highest level of education your mother completed (circle number).
  - 1 LESS THAN 8<sup>TH</sup> GRADE
  - 2 8<sup>TH</sup> GRADE – HIGH SCHOOL (DID NOT COMPLETE HIGH SCHOOL)
  - 3 COMPLETED HIGH SCHOOL
  - 4 SOME COLLEGE
  - 5 COMPLETED COLLEGE
  - 6 SOME GRADUATE/PROFESSIONAL SCHOOL
  - 7 COMPLETED GRADUATE/PROFESSIONAL SCHOOL
5. Please indicate the highest level of education your father completed (circle number).
  - 8 LESS THAN 8<sup>TH</sup> GRADE
  - 9 8<sup>TH</sup> GRADE – HIGH SCHOOL (DID NOT COMPLETE HIGH SCHOOL)
  - 10 COMPLETED HIGH SCHOOL
  - 11 SOME COLLEGE
  - 12 COMPLETED COLLEGE
  - 13 SOME GRADUATE/PROFESSIONAL SCHOOL
  - 14 COMPLETED GRADUATE/PROFESSIONAL SCHOOL
6. Please list your mother's occupation: \_\_\_\_\_.
7. Please list your father's occupation: \_\_\_\_\_.

## Appendix D

### Cognitive Behavior Therapy- Applicability Scale (CBT-AS) for Validation

Assume that you decided to seek therapy or counseling because of emotional difficulties (like feeling sad) or things you might be going through (like the loss of a loved one).

Using the scale below, please rate how much you would agree or disagree with the help having the following characteristics:

<i>Disagree strongly</i>	<i>Disagree somewhat</i>	<i>Neutral</i>	<i>Agree somewhat</i>	<i>Agree strongly</i>
1	2	3	4	5

1. I would deal a lot with how I'm thinking about things in my life.
2. I would need to trust the therapist.
3. I would need to work together with the therapist.
4. I would be encouraged to take a teamwork approach--together the therapist and I would decide what to work on.
5. I would have to do assignments that apply what I learned between sessions.
6. I would focus on specific problems I'm dealing with.
7. I would have to set goals related to my current problems.
8. I would work on things I'm dealing with right now, not things from my past.
9. I would learn how to be "my own therapist," so that I can begin to deal with things without needing help.
10. I would have between 4-14 sessions with the therapist.
11. I would meet with the therapist for one hour each week.
12. I would have each session with the therapist as a structured time, meaning that there are definite things we would do each week.
13. I would answer the therapist's questions to help figure out why I feel or think certain things.
14. I would answer the therapist's challenges to my thoughts.



15. I would act as though my therapist's and my ideas are equally important.
16. I would be the only one in therapy; my family or friends do not come.
17. I would need to talk a lot about my thoughts.
18. I would need to talk a lot about my feelings.
19. I would be asked to describe a situation in a lot of detail so I could identify specific thoughts or feelings I had during that situation.
20. I would have a very active role in whether I feel better.
21. I would focus on learning how thoughts cause feelings.
22. I would answer the therapist's direct questions.
23. I would be directed to do some activities (example: therapist might ask me to go walking three times a week) rather than just talking.
24. I would complete paperwork each week.

**Please answer the following questions about this questionnaire:**

1. Were these questions clear?

---

---

2. Did you understand these items?

---

---

3. Are there any other important factors you would consider if you sought therapy?

---

---

## **Appendix E**

### **Debriefing for Validation Study**

Thank you very much for participating in this study. We were interested in the psychometric properties of the Cognitive Behavior Therapy Applicability Scale.

If you are concerned about any psychological difficulties at this time, it is important for you to know that such difficulties are treatable and that several treatment facilities exist in the region (listed below). If you feel that you could benefit from such treatment, you may (or may not ) call any (or all) of the facilities to discuss any concerns you may have with the appropriate healthcare professionals.

Again, thank you for participating. If you have any additional questions or concerns, please contact Lydia C. Jackson (777-3803) or Dr. Amy Wenzel (777-4496).

<b>University of North Dakota Psychological Services Center*</b>	<b>777-3691</b>
<b>University of North Dakota Counseling Center**</b>	<b>777-2127</b>
<b>Family Institute</b>	<b>772-1588</b>
<b>Grand Forks Clinic-Psychology</b>	<b>780-6444</b>
<b>Northeast Human Service Center-24-Hour Crisis Line</b>	<b>775-0525</b>

\* payment is on a sliding scale dependent on income

\*\* counseling services are free



## **Appendix F**

### **Grand Forks Herald Ad in City Briefs:**

Individuals at least 30 years of age are being recruited for a psychology study examining the nature of thoughts related to emotional experiences. Compensation provided. Confidentiality strictly maintained. Contact Christie Jackson, UND Department of Psychology, 777-4831.

## **Appendix G**

### **UND Channel 3 Television Ad:**

Individuals are being recruited for a psychology study examining the nature of thoughts related to emotional experiences. Compensation provided. Contact Christie Jackson, UND Department of Psychology, 775-6530.



## Appendix H

### Orthogonal Cultural Identification Scale

The following questions ask how close you are to different cultures. You may identify with more than one culture, so please mark *all* responses that apply to you.

1. Some families have special activities or traditions that take place every year at particular times (such as holiday parties, special meals, religious activities, trips or visits). How many of these special activities or traditions did your family of origin have when you were growing up that are based on...

	A lot	Some	A few	None at all
White American or Anglo culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asian or Asian-American culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mexican-American or Spanish culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black or African-American culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
American Indian culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. When you have your own family, will you do special things together or have special traditions based on...

	A lot	Some	A few	None at all
White American or Anglo culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asian or Asian-American culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mexican-American or Spanish culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black or African-American culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
American Indian culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Does your family live by or follow the way of life of...

	A lot	Some	A few	None at all
White American or Anglo culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asian or Asian-American culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mexican-American or Spanish culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black or African-American culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
American Indian culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Do you live by or follow the way of life of...

	A lot	Some	A few	None at all
White American or Anglo culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asian or Asian-American culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mexican-American or Spanish culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black or African-American culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
American Indian culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Is your family a success in the way of life of...

	A lot	Some	A few	None at all
White American or Anglo culture	[ ]	[ ]	[ ]	[ ]
Asian or Asian-American culture	[ ]	[ ]	[ ]	[ ]
Mexican-American or Spanish culture	[ ]	[ ]	[ ]	[ ]
Black or African-American culture	[ ]	[ ]	[ ]	[ ]
American Indian culture	[ ]	[ ]	[ ]	[ ]

6. Are you a success in the way of life of...

	A lot	Some	A few	None at all
White American or Anglo culture	[ ]	[ ]	[ ]	[ ]
Asian or Asian-American culture	[ ]	[ ]	[ ]	[ ]
Mexican-American or Spanish culture	[ ]	[ ]	[ ]	[ ]
Black or African-American culture	[ ]	[ ]	[ ]	[ ]
American Indian culture	[ ]	[ ]	[ ]	[ ]



## Appendix I

### Extended Attributional Style Questionnaire

#### Directions

Please try to vividly imagine yourself in each of the situations or sequences of events that follow. Picture each situation as clearly as you can and as if the events were happening to you right now. Place yourself in each situation and decide what you feel would have caused it if it actually happened to you. Although events may have many causes, we want you to choose only one--the major cause if the event actually happened to you. For each situation, you will write down this cause in the blank provided. Then we will ask you some questions about the cause. After you have answered the questions about the cause of the event, think about how you'd react if the situation actually occurred in your life and what the occurrence of the situation would mean to you. Then we will ask you some questions about your views of and reactions to the situation.

It is important to remember that there are no right or wrong answers to the questions. The important thing is to answer the questions in a way that corresponds to what you would think and feel if the situations actually were occurring in your life.

1. Imagine that the following sequence of events actually happens to you:

You take an exam and receive a low grade on it.

Questions 1a-d ask about the cause of your low grade on the exam.

- a. Write down the one major cause of your low grade on the exam.

- 
- b. Is it something about you or something about other people or circumstances that caused your low grade on the exam? (Circle one number.)

Totally caused  
by other people  
or circumstances

1      2      3      4      5      6      7

Totally  
caused  
by me

- c. In the future when taking exams, will the cause of the low grade on this exam also cause other exam grades of yours to be low? (Circle one number.)

Will never again  
cause my exam  
grades to be low

1

2

3

4

5

6

7

Will always  
cause my  
exam grades  
to be low

- d. Is the cause of your low grade on the exam something that just causes problems in your exam grades, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in my  
exam grades

1

2

3

4

5

6

7

Causes problems  
in all areas  
of my life

- e. How important is it to you that your grade on the exam is low? (Circle one number.)

Not at all  
important

1

2

3

4

5

6

7

Extremely  
important



2. Imagine that the following sequence of events actually happens to you:

You don't have a boyfriend/girlfriend (or spouse) although you want one.

Questions 2a-d ask about the cause of your not having a boyfriend/girlfriend (or spouse) although you want one.

- a. Write down the one major cause of your not having a boyfriend/girlfriend (or spouse) although you want one.

- 
- b. Is it something about you or something about other people or circumstances that caused your not having a boyfriend/girlfriend (or spouse) although you want one? (Circle one number.)

Totally caused  
by other people  
or circumstances

1      2      3      4      5      6      7

Totally  
caused  
by me

- c. In the future when you want a boyfriend/girlfriend (or spouse), will the cause of your not having a boyfriend/girlfriend (or spouse) now also cause you to not have a boyfriend/girlfriend (or spouse) then? (Circle one number.)

Will never again  
cause me to not  
have a boyfriend/  
girlfriend  
(or spouse)

1      2      3      4      5      6

Will always  
cause me to  
not have  
a boyfriend/  
girlfriend  
(or spouse)

7

- d. Is the cause of your not having a boyfriend/girlfriend (or spouse) something that just causes problems in whether or not you have a boyfriend/girlfriend (or spouse), or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in whether  
or not I have a  
boyfriend/girlfriend  
(or spouse)

1      2      3      4      5      6      7

Causes problems  
in all areas  
of my life

e. How important is it to you that you don't have a boyfriend/girlfriend (or spouse) although you want one? (Circle one number.)

Not at all  
important

1

2

3

4

5

6

7

Extremely  
important



3. Imagine that the following sequence of events actually happens to you:

A friend comes to you with a problem, and you are not as helpful as you would like to be.

Questions 3a-d ask about the cause of your not being as helpful as you would like to be to your friend.

- a. Write down the one major cause of your not being as helpful as you would like to be to your friend.

- b. Is it something about you or something about other people or circumstances that caused your not being as helpful as you would like to be to your friend? (Circle one number.)

Totally caused  
by other people  
or circumstances

1      2      3      4      5      6

Totally caused  
7      by me

- c. In the future when a friend comes to you with a problem, will the cause of your not being as helpful as you would like to be to your friend now also cause you to not be as helpful as you would like to be to a friend then? (Circle one number.)

Will never again  
cause me to not  
be as helpful  
as I would  
like to be

1      2      3      4      5      6      7

Will always  
cause me to  
not be as  
helpful as I  
would like to  
be

- d. Is the cause of your not being as helpful as you would like to be to your friend something that just causes problems in your helping friends, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in my  
helping friends

1      2      3      4      5      6

Causes  
7 problems  
in all areas  
of my life

- g. How important is it to you that you are not as helpful as you would like to be to your friend? (Circle one number.)

Not at all  
important

1      2      3      4      5      6      7

Extremely  
important

4. Imagine that the following sequence of events actually happens to you:

As an assignment, you give an important talk in class, and the class reacts negatively.

Questions 4a-d ask about the cause of the class reacting negatively to your talk.

- a. Write down the one major cause of the class reacting negatively to your talk.

- 
- b. Is it something about you or something about other people or circumstances that caused the class to react negatively to your talk? (Circle one number.)

Totally caused  
by other people  
or circumstances

1      2      3      4      5      6      7

Totally  
caused  
by me

- c. In the future when you give important talks in class, will the cause of the class reacting negatively to this talk also cause the class to react negatively to other talks of yours? (Circle one number.)

Will never again  
cause the class  
to react  
negatively to  
my talks

1      2      3      4      5      6      7

Will always  
cause the class  
to react  
negatively to  
my talks

- d. Is the cause of the class reacting negatively to your talk something that just causes problems when you give talks, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just when I  
give talks

1      2      3      4      5      6      7

Causes problems  
in all areas  
of my life

- g. How important is it to you that the class reacts negatively to your talk? (Circle one number.)

Not at all  
important

1      2      3      4      5      6      7

Extremely  
important



5. Imagine that the following sequence of events actually happens to you:

Your parents have been treating you in a negative way.

Questions 5a-d ask about the cause of your parents treating you in a negative way.

- a. Write down the one major cause of your parents treating you in a negative way.

- 
- b. Is it something about you or something about other people or circumstances that caused your parents to treat you in a negative way? (Circle one number.)

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me
---	---	---	---	---	---	---	---	----------------------------

- c. In the future when interacting with your parents, will the cause of them treating you in a negative way now also cause them to treat you in a negative way then? (Circle one number.)

Will never again cause my parents to treat me in a negative way	1	2	3	4	5	6	Will 7 always cause my parents to treat me in a negative way
--	---	---	---	---	---	---	---

- d. Is the cause of your parents treating you in a negative way something that just causes problems when you interact with them, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems just when I interact with my parents	1	2	3	4	5	6	7	Causes problems in all areas of my life
---	---	---	---	---	---	---	---	--

- g. How important is it to you that your parents have been treating you in a negative way? (Circle one number.)

Not at all important	1	2	3	4	5	6	7	Extremely important
-------------------------	---	---	---	---	---	---	---	------------------------

6. Imagine that the following sequence of events actually happens to you:

Your gradepoint average (GPA) for the semester is low.

Questions 6a-d ask about the cause of your low gradepoint average (GPA) for the semester.

- a. Write down the one major cause of your low gradepoint average (GPA) for the semester.

- 
- b. Is it something about you or something about other people or circumstances that caused your low gradepoint average (GPA) for the semester? (Circle one number.)

Totally caused  
by other people  
or circumstances

1

2

3

4

5

6

7

Totally  
caused  
by me

- c. In the future when you receive your grades for a semester, will the cause of this semester's low gradepoint average (GPA) also cause other semesters' gradepoint averages (GPA's) of yours to be low? (Circle one number.)

Will never again  
cause my  
semester  
gradepoint  
averages (GPA's)  
to be low

1

2

3

4

5

6

7

Will always  
cause my  
semester  
gradepoint  
averages  
to be low

- d. Is the cause of your low gradepoint average (GPA) for the semester something that just causes problems in your grades, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in my  
grades

1

2

3

4

5

6

7

Causes problems  
in all areas  
of my life

- g. How important is it to you that your gradepoint average (GPA) for the semester is low? (Circle one number.)

Not at all  
important

1

2

3

4

5

6

7

Extremely  
important



7. Imagine that the following sequence of events actually happens to you:

At a party, people don't act interested in you.

Questions 7a-d ask about the cause of people not acting interested in you at the party.

- a. Write down the one major cause of people not acting interested in you at the party.

- 
- b. Is it something about you or something about other people or circumstances that caused people to not act interested in you at the party? (Circle one number.)

Totally caused  
by other people  
or circumstances

1      2      3      4      5      6      7

Totally  
caused  
by me

- c. In the future when at parties, will the cause of people not acting interested in you at this party also cause people to not act interested in you at other parties? (Circle one number.)

Will never again  
cause people  
to not act  
interested in  
me at parties

1      2      3      4      5      6      7

Will always  
cause people  
to not act  
interested in  
me at parties

- d. Is the cause of people not acting interested in you at the party something that just causes problems in your interactions at parties, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in my  
interactions  
at parties

1      2      3      4      5      6

Causes problems  
7 in all areas  
of my life

- g. How important is it to you that at a party, people don't act interested in you? (Circle one number.)

Not at all  
important

1      2      3      4      5      6

7 Extremely  
important

8. Imagine that the following sequence of events actually happens to you:

You can't get all the work done that others expect of you.

Questions 8a-d ask about the cause of your not getting all the work done that others expect of you.

- a. Write down the one major cause of your not getting all the work done that others expect of you.

- 
- b. Is it something about you or something about other people or circumstances that caused your not getting all the work done that others expect of you? (Circle one number.)

Totally caused  
by other people  
or circumstances

1

2

3

4

5

6

7

Totally  
caused  
by me

- c. In the future when doing the work that others expect, will the cause of your not getting all the work done now also cause you to not get all the work done then? (Circle one number.)

Will never again  
cause me to  
not get all  
the work done

1

2

3

4

5

6

7

Will always  
cause me to  
not get all  
the work done

- d. Is the cause of your not getting all the work done that others expect of you something that just causes problems in your getting the work done that others expect, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in getting  
the work done  
that others  
expect

1

2

3

4

5

6

7

Causes problems  
in all areas  
of my life

- g. How important is it to you that you can't get all the work done that others expect of you? (Circle one number.)

Not at all  
important

1

2

3

4

5

6

7

Extremely  
important



9. Imagine that the following sequence of events actually happens to you:

You apply for admission into graduate or professional schools but don't get accepted at any you want to attend.

Questions 9a-d ask about the cause of your not getting accepted at any of the graduate or professional schools you want to attend.

- a. Write down the one major cause of your not getting accepted at any of the graduate or professional schools you want to attend.

- 
- b. Is it something about you or something about other people or circumstances that caused your not getting accepted at any of the graduate or professional schools you want to attend? (Circle one number.)

Totally caused  
by other people  
or circumstances

1      2      3      4      5      6      7

Totally  
caused  
by me

- c. In the future when applying for admission into graduate or professional schools, will the cause of your not getting accepted now at any of the graduate or professional schools you want to attend also cause you to not get accepted then at any of the graduate or professional schools you want to attend? (Circle one number.)

Will never again  
cause me to  
not get accepted

1      2      3      4      5      6      7

Will always  
cause me to  
not get  
accepted

- d. Is the cause of your not getting accepted at any of the graduate or professional schools you want to attend something that just causes problems in your getting accepted at graduate or professional schools you want to attend, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in my  
getting accepted  
at graduate or  
professional  
schools I  
want to attend

1      2      3      4      5      6      7

Causes  
problems in all  
areas of my  
life

g. How important is it to you that you don't get accepted at any of the graduate or professional schools you want to attend? (Circle one number.)

Not at all  
important

1

2

3

4

5

6

7 Extremely  
important



10. Imagine that the following sequence of events actually happens to you:

During the first year of working in the career of your choice, you receive a negative evaluation of your job performance from your employer.

Questions 10a-d ask about the cause of the negative evaluation of your job performance from your employer.

- a. Write down the one major cause of the negative evaluation of your job performance from your employer.

- 
- b. Is it something about you or something about other people or circumstances that caused the negative evaluation of your job performance from your employer? (Circle one number.)

- c. In the future when your job performance in the career of your choice is evaluated, will the cause of this negative job evaluation also cause other job evaluations to be negative? (Circle one number.)

Will never again  
cause my job  
evaluations  
to be negative

1   2   3   4   5   6   7

Will always  
cause my job  
evaluations  
to be negative

- d. Is the cause of the negative evaluation of your job performance from your employer something that just causes problems in your job evaluations in the career of your choice, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in my job  
performance  
in the career  
of my choice

1   2   3   4   5   6   7

Causes  
problems in all  
areas of my  
life

- g. How important is it to you that during the first year of working in the career of your choice, you receive a negative evaluation of your job performance from your employer? (Circle one number.)

Not at all  
important

1   2   3   4   5   6

7 Extremely  
important

11. Imagine that the following sequence of events actually happens to you:

Your relationship with your boyfriend/girlfriend (or spouse) ends even though you would like it to continue.

Questions 11a-d ask about the cause of your relationship with your boyfriend/girlfriend (or spouse) ending even though you would like it to continue.

- a. Write down the one major cause of your relationship with your boyfriend/girlfriend (or spouse) ending even though you would like it to continue.

- 
- b. Is it something about you or something about other people or circumstances that caused your relationship with your boyfriend/girlfriend (or spouse) to end even though you would like it to continue? (Circle one number.)

Totally caused  
by other people  
or circumstances

1      2      3      4      5      6      7

Totally  
caused  
by me

- c. In the future when you are involved in a relationship, will the cause of your relationship with your boyfriend/girlfriend (or spouse) ending now also cause other relationships with boyfriends/girlfriends (or spouses) to end even though you would like them to continue? (Circle one number.)

Will never again  
cause my  
relationships  
with boyfriends/  
girlfriends  
(or spouses)  
to end

1      2      3      4      5      6      7

Will always  
cause my  
relationships  
with  
boyfriends/  
girlfriends  
(or spouses)  
to end

- d. Is the cause of your relationship with your boyfriend/girlfriend (or spouse) ending even though you would like it to continue something that just causes problems in your relationships, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in my  
relationships

1      2      3      4      5      6

Causes problems  
7 in all areas  
of my life



g. How important is it to you that your relationship with your boyfriend/girlfriend (or spouse) ends even though you would like it to continue? (Circle one number.)

Not at all  
important

1

2

3

4

5

6

7 Extremely  
important

12. Imagine that the following sequence of events actually happens to you:

A person with whom you really want to be friends does not want to be friends with you.

Questions 12a-d ask about the cause of the person not wanting to be friends with you.

- a. Write down the one major cause of the person not wanting to be friends with you.

- 
- b. Is it something about you or something about other people or circumstances that caused the person to not want to be friends with you? (Circle one number.)

Totally caused  
by other people  
or circumstances

1

2

3

4

5

6

7

Totally  
caused  
by me

- c. In the future when you want to be friends with someone, will the cause of this person not wanting to be friends with you also cause other people to not want to be friends with you? (Circle one number.)

Will never again  
cause other  
people to not  
want to be  
friends with me

1

2

3

4

5

6

7

Will always  
cause other  
people to not  
want to be  
friends with  
me

- d. Is the cause of the person not wanting to be friends with you something that just causes problems in your making friends, or does it also cause problems in other areas of your life? (Circle one number.)

Causes problems  
just in my  
making friends

1

2

3

4

5

6

7

Causes problems  
in all areas  
of my life

- g. How important is it to you that a person with whom you really want to be friends does not want to be friends with you? (Circle one number.)

Not at all  
important

1

2

3

4

5

6

7 Extremely  
important



## Appendix J

### Cognition Checklist

Please rate how often you have had the following thoughts according to this scale:

Never						Always
0	1	2	3	4	5	

1. I'm worthless.
2. I will never overcome my problems.
3. Life isn't worth living.
4. There's no one left to help me.
5. Nothing ever works out for me.
6. I have become physically unattractive.
7. I'm not worthy of other people's attention or affection.
8. I don't deserve to be loved.
9. People don't respect me anymore.
10. I've lost the only friends I've had.
11. I'm worse off than they are.
12. No one cares whether I live or die.
13. I'll never be as good as other people are.
14. I'm a social failure.
15. I'm going to have an accident.
16. There's something very wrong with me.
17. I am going to have a heart attack.
18. Something awful is going to happen.
19. Something will happen to someone I care about.
20. I'm losing my mind.
21. What if I get sick and become an invalid?
22. I am going to be injured.
23. What if no one reaches me in time to help?
24. I might be trapped.
25. I am not a healthy person.
26. Something might happen that will ruin my appearance.

## Appendix K

### Cognitive Response Test

You will read some short phrases or sentences which describe certain common life situations. We would like for you to respond by writing the first thought you would have if you found yourself in this situation.

*Additional Suggestions:*

- A. Give your thoughts, rather than feelings or how you might behave.
  - B. Give a complete thought, rather than just a one word response.
  - C. Put something down for each item, rather than leaving any blanks.
- 
1. When I consider an upcoming family reunion, I think...
  2. My employer says he will be making some major staff changes. I immediately think...
  3. Lately my work has become more and more demanding. I think...
  4. When I think about my future, I believe...
  5. A fellow employee compliments me on my skills. I think...
  6. I take two weeks off from work. When I come back, a person in another department says she didn't even know I was gone. My first thought is...
  7. A friend and I have been planning an activity I especially enjoy for a long time. At the last minute, my friend decided to do something else and invites me to go along. I think...
  8. When I consider being single, I think...
  9. I pass by someone I used to know quite well and they appear not to see me. I say to myself...
  10. On days when I'm not feeling on top of everything, I think...
  11. I find that I've been making a lot of mistakes lately; I believe...
  12. When I think about my relationships in high school, my first thought is...
  13. The supervisor calls me to his office and says he is not as satisfied with my work as he used to be. I believe...
  14. Assume for this item that you are married. It has been over a week since my spouse said, "I love you." I say to myself...
  15. I make an error in my work and it is called to my attention. My first thought is...
  16. I invite an acquaintance to whom I am attracted to lunch some time this week. The person says, "I am busy every day this week, but let's get together sometime later." I think...
  17. A project that I have been involved with fell through. An associate implies that I am at fault. My first thought is...
  18. After I've been away from home for about an hour I try to remember whether or not I locked the door. My immediate thought is...
  19. After getting up in the morning, while dressing, I look at myself closely in the mirror and I think...
  20. It occurs to me that I have not achieved what I had hoped to by this time in my life. Then I say to myself...



21. While flipping through an old photograph album, I see a picture of myself and I think...
22. My doctor gives me some pills stressing that they could kill me if I take more than directed. My first thought is...
23. I enjoy a dish at a party. I get the recipe from the person who made it and try it at home. It doesn't come out the same. My first thought is...
24. When I consider my home life as a child, my immediate thought is...
25. When I compare the amount of happiness I have experienced to what my neighbors have experienced, I think...
26. When I get behind in my work, my first thought is...
27. When I consider the way my family treats me, I think to myself...
28. I have been injured in an automobile accident and can no longer work at my old job. I think...
29. When my neighbor describes his many activities and hobbies, I think...
30. I have the opportunity to take my first vacation in several years. I say to myself...
31. I learn that a friend at work has been promoted. He has been with the company less time than I have. I say to myself...
32. When I am asked to do a task that I have never done before, I usually think...
33. At a social gathering, I meet a person to whom I am quite attracted. My immediate thought is...
34. Assume for this item that you are single. I've been trying to get a date for the past three weekends and have not been successful. I think to myself...
35. Generally speaking, when I compare my physical health to that of my friends, I think...
36. My uncle, who has done me a favor, calls requesting help just as I am about to begin an outing. My first thought is...

## Appendix L

### Factor Analyzed CBT-AS

<i>Disagree strongly</i>	<i>Disagree somewhat</i>	<i>Neutral</i>	<i>Agree somewhat</i>	<i>Agree strongly</i>
1	2	3	4	5

#### **Factor One: Focused In-Session Behavior**

- \_\_\_\_\_ I would deal a lot with how I'm thinking about things in my life.
- \_\_\_\_\_ I would need to work together with the therapist.
- \_\_\_\_\_ I would focus on specific problems I'm dealing with.
- \_\_\_\_\_ I would need to talk a lot about my thoughts.
- \_\_\_\_\_ I would need to talk a lot about my feelings.
- \_\_\_\_\_ I would be asked to describe a situation in a lot of detail so I could identify specific thoughts or feelings I had during that situation.
- \_\_\_\_\_ I would focus on learning how thoughts cause feelings.

#### **Factor Two: Active Stance**

- \_\_\_\_\_ I would be encouraged to take a teamwork approach--together the therapist and I would decide what to work on.
- \_\_\_\_\_ I would have to do assignments that apply what I learned between sessions.
- \_\_\_\_\_ I would have to set goals related to my current problems.
- \_\_\_\_\_ I would work on things I'm dealing with right now, not things from my past.
- \_\_\_\_\_ I would have between 4-14 sessions with the therapist.
- \_\_\_\_\_ I would have each session with the therapist as a structured time, meaning that there are definite things we would do each week.
- \_\_\_\_\_ I would be directed to do some activities (example: therapist might ask me to go walking three times a week) rather than just talking.
- \_\_\_\_\_ I would complete paperwork each week.



**Factor Three: Structured Therapeutic Relationship**

- ☐ I would need to trust the therapist.
- ☐ I would meet with the therapist for one hour each week.
- ☐ I would answer the therapist's questions to help figure out why I feel or think certain things.
- ☐ I would answer the therapist's challenges to my thoughts.
- ☐ I would act as though my therapist's and my ideas are equally important.
- ☐ I would be the only one in therapy; my family or friends do not come.
- ☐ I would have a very active role in whether I feel better.
- ☐ I would answer the therapist's direct questions.

## Appendix M

### Consent Form for Main Study

**Introduction:** This investigation is being conducted by Lydia C. Jackson, a candidate for the doctoral degree in psychology, under the supervision of Drs. Amy Wenzel and John Tyler, who work in the psychology department here at UND.

**Project Description:** You are invited to participate in a research project evaluating thoughts people sometimes have, your mood, and ideas about therapy.

Your participation in this project will consist of completing a packet of questionnaires. This will take no longer than 1.5 hours and will be completed immediately following receipt of this consent form.

**Risks:** There are no physical risks associated with this study; however, some of the questionnaires ask you to consider what it might be like to go for therapy or about your mood. As such, for some individuals answering those questions may be difficult, and you are encouraged to speak with Lydia Jackson or you may contact Dr. Amy Wenzel at 777-4496. In addition, you may seek services at the University Counseling Center free of charge if you are a UND student, seek services at the Psychological Services Center on a sliding scale basis, or obtain other services of your choosing. Payment for any such treatment must be provided by you or your third party payor.

**Benefits:** The benefits from this study include an increased understanding of what people would like when they go for therapy. Your participation will also add to the knowledge of how depression and anxiety may differ among various cultural groups. Immediate benefits to you include the opportunity to experience scientific research.

**Confidentiality:** All information obtained in connection with your responses will be anonymous and will remain confidential. All data will be kept in a locked office for a period of three years, after which it will be destroyed. No individual responses will be reported, results will be reported only in grouped form.

**Voluntary Participation:** You are free to decide whether or not to participate. If you decide to participate, you are free to withdraw from the study at any time without fear of reprimand of any kind. Your decision of whether or not to participate will not prejudice your relations with the Psychology Department at the University of North Dakota.

**Questions:** If you have questions about the research, please call Lydia C. Jackson at 777-3803, or Dr. Amy Wenzel at 777-4496. If you have any other questions or concerns, please call the Office of Research and Program Development at 777-4279.

All of my questions have been answered, and I have been encouraged to ask any questions that I may have concerning this study in the future. I have read all of the above and willingly agree to participate in this study. I have also been provided with a copy of this consent form.

Name (please print): \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_



## Appendix N

### Debriefing for Main Study

Thank you very much for participating in this study. We were interested in exploring the nature of emotional concerns, the presence of troublesome thoughts, and the applicability of therapeutic techniques.

Today you filled out questionnaires asking about your mood. These questionnaires are used to identify people who may be experiencing symptoms of depression or anxiety. If you are concerned about these types of symptoms, it is important for you to know that such symptoms are treatable and that several treatment facilities exist in the region (listed below). If you feel that you may be depressed or anxious, or you feel you could benefit from such treatment, you may (or may not) call any (or all) of the facilities to discuss any concerns you may have with the appropriate healthcare professionals.

Again, thank you for participating. If you have any additional questions or concerns, please contact Christie Jackson (777-3803) or Dr. Amy Wenzel at the UND Psychology Department (777-4496) or the Office of Research and Program Development at 777-4279.

University of North Dakota Psychological Services Center*	777-3691
University of North Dakota Counseling Center**	777-2127
Family Institute	772-1588
Grand Forks Clinic-Psychology	780-6444
Northeast Human Service Center-24-Hour Crisis Line	775-0525

\* payment is on a sliding scale dependent on income

\*\* counseling services are free to UND students

## Appendix O

### Cognitive Response Test Coding (6/5/02)

*Developed by Christie Jackson and Peter Schmutzer*

1. Determine if the response is rational (R) or irrational. Irrational responses are responses that have unrealistic expectations or ideas not based in evidence. There are four main types of irrational responses that show logical errors:
  1. demand statement: Lately my work has become more and more demanding. I think: I need to find another job.
  2. absolutism: When I consider being married, my first thought is: I'll never get married.
  3. belief in luck: A fellow employee, who has been with the company less time than I is promoted. My immediate thought is: Some people sure are lucky.
  4. exaggeration: When I think of my success as a parent, my immediate thought is: I am a marvelous human being.

In addition, consider the following. Rational responses are related logically to the probe statement, are not characterized by one of the logical errors listed above, and often contain qualifiers (I guess...) or are in the form of a question (ex: will I be able to do it?)—these are scored rational, since they imply that alternative outcomes are conceivable and/or alternatives are being considered. Key words an irrational response may contain: never, always, should, must, have



to, got to. *Thus, the subject has not jumped to conclusions, exaggerated, overgeneralized, or engaged in other logical errors or cognitive distortions.*

2. For irrational responses, determine if it is an irrational-depressed or irrational-other response.

An irrational depressed (I-D) thought contains a *negative* view about the self, world, or future. An example of an irrational-depressed thought is: I have a whole day's activities planned with a friend. Soon after awakening, I get a message my friend will not be coming. My immediate thought is: He must not like me.

If the response is irrational, but not irrational-depressed, then the thought is scored irrational-other. An example of an irrational-other response is: I have a whole day's activities planned with a friend. Soon after awakening, I get a message my friend will not be coming. My immediate thought is: He must have had to work. Note that the response is irrational, because there is no evidence that he has to work, but the absence of negative views about the self, world, or future indicates that it should be scored I-O.

3. Where an item is left blank, a one word response is given, or if it is impossible to determine whether the thought is irrational or rational, then the response is coded non-scorable (N-S).

4. Other considerations (the following rules were added as a result of mutual decisions during weekly meetings and consensus coding):

2) questions—**R** (based on content, not punctuation), unless clear evidence of current negative view

b) negative past—**R or IO**, unless clear evidence of current negative view

c) when a person indicates a need to change something about the self, i.e.,  
“I need to get organized; I need to work out” it **ID**

d) ambiguous responses—**NS**

e) if response contains depressed attribute & nondepressed attribute, and if all other conditions apply, then code **R**



## Appendix P

March 29, 2002

John T. Watkins, Ph.D.  
Atlanta Center for Cognitive Therapy  
1772 Century Boulevard  
Atlanta, Georgia 30345

Dr. Watkins:

I am sending you two completed Cognitive Response Tests, per our phone conversation last fall regarding my dissertation. I am seeking your assistance in scoring these questionnaires, as they are part of some pilot data I am collecting in order to achieve interrater reliability among my coding team. When I have collected the actual participants' data, I would like to send you a few questionnaires then as well. Thank you very much for your time and assistance.

Sincerely,

Chrisie Jackson  
University of North Dakota  
Box 8380  
Grand Forks, ND 58202  
Tel: (701) 777-4831  
Fax: (701) 777-2776  
E-mail: lydia\_jackson@und.nodak.edu

**Appendix Q**  
**CRT Prototype Responses**

The following are specific responses discussed in weekly meetings and the coding decisions that were made to apply to similar responses:

- 1) #11: I am stressed out. ID
- 2) #12: I am glad we broke up. R
- 3) #19: I need more sleep. ID
- 4) #13: What a waste of time. R
- 5) #23: What did I do wrong? R
- 6) #3: I need a break. IO
- 7) #6: Thanks a lot, bitch. IO
- 8) #8: I enjoy it now, but worry about being alone in the future. R
- 9) #19: Great, another zit! R
- 10) #26: I need to catch up and spend extra time in the evenings. ID
- 11) #31: That seems unfair. R
- 12) #12: My first thought is, what the hell was I thinking? I hung out with some real losers. R
- 13) #8: My friend is taking me for granted. IO
- 14) #12: Why in the world did I date that guy? R
- 15) #36: I feel guilty, but I tell him I'm busy and offer to help him later. ID
- 16) #20: Look at that hair. NS



- 17)#24: I have a great and loving family. R
- 18)#25: I must be lucky. IO
- 19)#29: I wish I could find the time. ID
- 20)#7: That's great; go to a lot of trouble just to drop everything. ID
- 21)#35: I need to go outside more.
- 22)#14: I should fix it. ID
- 23)#15: He is busy. R
- 24)#18: I should go check. IO

**Appendix R**  
**CRT Inter-rater Reliability Results**

**6/20/02**

Overall Kappa = 0.74

Overall Percent Agreement = 84%

**7/4/02**

Overall Kappa = 0.74

Overall Percent Agreement = 84%

**7/12/02**

Overall Kappa = 0.74

Overall Percent Agreement = 84%

**7/25/02**

Overall Kappa = 0.75

Overall Percent Agreement = 85%

**Final Inter-rater Reliability:**

Final Overall Kappa = 0.75

Final Overall Percent Agreement = 85%



## Appendix S

### CBT-AS Feedback from Standardization Sample

<u>Were these questions clear?</u>	<u>Did you understand these items?</u>	<u>Are there any other important factors you would consider if you sought therapy?</u>
YES	YES	NO
YES	YES	INSURANCE/COST
YES	YES	NO
YES	YES	---
YES	YES	IF THE THERAPIST SEEMED CARING OR IS JUST SEEING YOU FOR THE \$
YES	YES	COST
YES	YES	COST/AVAILABILITY
YES	YES	CHRISTIAN BACKGROUND
WHAT DO YOU MEAN BY PAPERWORK?	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	SHOULD I GET MY FAMILY & FRIENDS INVOLVED?
YES	YES	---
YES	YES	NO
YES	YES	JUST HOPEFULLY GET MY PROBLEM SOLVED
YES	YES	NO
YES	YES	MY CURRENT BEHAVIOR AND WHY I BEHAVED THAT WAY

YES	YES	NO
YES	YES	NO
SOMEWHAT. SOME SEEMED NOT DETAILED ENOUGH B/C THERAPY CAN BE (DETAILED)	YES	GENDER
YES	YES	YES
YES	YES	NO
YES	YES	NO
YES	YES	---
YES	YES	NO
YES	YES	NO
YES	YES	IT'S FOR MY BENEFIT, TAKE ADVANTAGE & USE THE THERAPIST
YES	YES	JUST SOMEONE TO LISTEN TO MY PROBLEMS INSTEAD OF ANALYZE THEM
MOSTLY, A FEW WERE UNCLEAR	YES	MY SCHEDULE MY STATE OF BEING (LEVEL)
YES	YES	NO
YES	YES	NO
SOME OF THEM, MOST WERE	YES	COST, REPUTATION OF THERAPIST
YES	YES	NO
MOSTLY, SOME WERE HARD TO UNDERSTAND W/O KNOWLEDGE OF TX	YES	NO
YES	YES	NO
YES	YES	YOU COVERED MOST OF THEM
MOST	FOR THE MOST PART	
YES	YES	NO
YES	YES	CONFIDENTIALITY



YES	SOMEWHAT	I WOULD HAVE TO THINK OF FUTURE CHANGES THAT MAY HAVE TO RESULT TO GET HAPPY AGAIN
YES	YES	NO
SOMEWHAT, A LITTLE VAGUE	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NONE
YES	YES	CONSIDER SELF-ESTEEM OF CLIENT BEFORE S/HE SEEKS THERAPY
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
MAYBE THEY CONFUSED ME & LEFT TOO MANY VARIABLES	MOSTLY	MORE SPECIFICATIONS AS TO WHERE, HOW, & WHY
YES	YES	NO
YES	YES	NO
YES	YES	VARIETY OF THERAPY IN THE SESSIONS TO SEE IF CERTAIN APPROACHES WORK BETTER FOR ME
YES	YES	CONFIDENTIALITY
YES	YES	NO
YES	YES	DEALING W/ SOCIAL INTERACTIONS DUE TO YOUR CURRENT STATE

YES	YES	MEDS?
SOME WERE VAGUE	YES	NO
YES	YES	NO
YES, SEEMED REPETITIVE	YES	WHAT THE THERAPISTS SPECIALIZED IN. A MORE SPECIFIC TYPE OF THERAPY OR STYLE
YES	YES	JUST MAINLY THE TRUST FACTOR & THAT THE THERAPY BE ABOUT ME & WHAT I NEED
YES	YES	A CASUAL "FRIEND" TYPE RELATIONSHIP WITH THE THERAPIST
SOMEWHAT, MOST OF THEM WERE	YES	THERAPIST AND THEIR CO- WORKERS: WHETHER I FELT COMFORTABLE IN THE ENVIRONMENT
LATER HALF WERE MORE CLEAR THAN THE FIRST HALF	FOR THE MOST PART	DREAMS
YES	YES, TO ANSWER "SOMEWHAT" WAS A LITTLE CONFUSING TO SOME QUESTIONS I SEE IT AS TOO SHAKY OF AN ANSWER	I WOULD FEEL LIKE I NEED TO MEET MORE THAN ONCE FOR WEEK FOR JUST AN HOUR!
YES	YES	NO
YES	YES	NO
YES	YES	WOULD NEVER GO TO A THERAPIST
YES	YES	NO
NOT REALLY	FOR THE MOST PART	NO
YES	YES	NO
YES	YES	NO
FAIRLY, NOT NECESSARILY DETAILED THOUGH	TO AN UNSPECIFIC EXTENT	NOT REALLY



FAIRLY CLEAR—A FEW OF THE QUESTIONS COULD HAVE BEEN CLARIFIED	YES	NO
MOSTLY	YES	NO
YES	YES	SOMETIMES THE THERAPIST WOULD LIKE TO TAKE THE THERAPY TOWARD A DIFFERENT DIRECTION THAN THE CLIENT WOULD
YES	YES	CONFIDENTIALTY, SPORADIC MEETINGS
YES	YES	NO
YES	YES	NO
YES	YES	NO
SOMEWHAT CONFUSING	I JUST TOLD YOU!	COST OF THERAPY
YES	YES	NO
KIND OF, I DIDN'T REALLY SEE HOW SOME RESPONSES FIT W/ THE STATEMENT THOUGH	YES	DON'T KNOW
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	FAMILY INVOLVEMENT, EFFECTS OF THERAPY ON LIFE SOCIALLY, FLEXIBILITY OF TIME, PERSONAL NEEDS-LEVEL OF PRESUMED PSYCH INVOLVEMENT SUBSEQUENTLY
YES	YES	COST, RESULTS
YES	YES	NO
YES	YES	NO
YES	YES	SAME SEX
YES	YES	NO
YES	YES	NO

YES	YES	I DON'T THINK I WOULD EVER CONSIDER THERAPY
YES	YES	POSSIBLE RELATIONSHIPS IN MY LIFE
YES	YES	NO
FOR THE MOST PART, THEY WERE A LITTLE HARD TO UNDERSTAND	YES	IF THE THERAPIST WOULD LET ME TALK OR IF THEY TOLD HOW I WAS FEELING
FOR THE MOST PART, SOME WERE A LITTLE HARD TO UNDERSTAND	YES	I DON'T THINK SO
NOT REALLY	FOR THE MOST PART, YES	NO
YES, VERY MUCH SO	YES	NO
YES SOME OF THEM WERE VERY CLEAR, BUT THERE WERE A COUPLE THAT WERE NOT	YES YES I UNDERSTOOD	NO NO
YES	VERY CLEARLY	AN HONESTY QUESTION
YES	YES	NO
YES	YES	MAKE SURE THE PATIENT IS IN THE RIGHT STATE OF MIND
YES	YES	NO
YES	YES	I WOULD TALK A LOT ABOUT MY CHILDHOOD
YES	YES	NO
YES	YES	IF I REALLY TRUSTED MY THERAPIST
YES, BUT IT SEEMED LIKE THEY WERE SUGGESTIVE OF AN ANSWER	YES	N/A
YES	YES	NO
YES	YES	YES
YES	YES	NO



YES	YES	PERHAPS PHYSICAL CHARACTERISTICS OF THE THERAPIST WOULD INFLUENCE MY ABILITY TO OPEN UP
YES	YES	NO
YES	YES	NO
YES	YES	MY PAST WOULD BE PRETTY IMPORTANT
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	THE THERAPIST WAS WELL KNOWN & CONSIDERED TO BE GOOD. IF RECOMMENDED FROM SOMEONE ELSE
YES	YES	NO
YES	YES	MEDICATION IF SEVERE ENOUGH. BRINGING FAMILY/FRIENDS INTO THERAPY AFTER AWHILE IF IT WAS NEEDED.
YES	YES	NO
YES	YES	HOW FAR DID I WANT TO GO-WHAT I WANTED OUT OF THERAPY
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
MOSTLY YES	YES	SOMEONE AROUND MY AGE, THAT COULD DEAL W/ THINGS YOUNGER PEOPLE GO THROUGH

THEY WERE SOMEWHAT CLEAR, BUT SOME OF THEM NEED MORE EXPLAINING	YES	WHETHER THE THERAPIST WAS MALE OR FEMALE, AGE, BACKGROUND OF THERAPIST, & THEIR STYLE OF THERAPY (ARE THEY ASSERTIVE, PASSIVE-DO THEY CHALLENGE ME- UNDERSTAND ME- COMPASSIONATE)
YES	YES	NO
YES, COULD BE MORE ELABORATE THOUGH	YES	WHY DO I FEEL THE WAY I DO, PAST THOUGHTS & FEELINGS RELATED TO NOW
YES, VERY CLEAR	YES, EASILY & WITH NO MAJOR PROBLEMS	NONE
YES	YES	NO
YES	YES	REPUTATION OF THERAPIST & SPECIFIC NATURE OF MY PROBLEM
FOR THE MOST PART NOT REALLY	YES YES	NO NO
YES	YES	IF THE THERAPIST WAS MAN OR WOMAN WOULD BE A BIG DEAL FOR ME. WOMEN ARE EASIER TO TALK TO.
YES	YES	MAYBE ASK IF A PERSON IS WILLING TO DO ALL TYPES OF THERAPY: HYPNOSIS, HOSPITALIZATION, ETC.
YES	YES	NO
YES	YES	NO
YES-DIRECT	YES	NO
YES	YES	MAKING SURE THAT A PRESENT FEELING DOES NOT BLUR THE TRUE STATE OF THAT PERSON
YES	YES	NO
YES	YES	NO



YES	YES	BE ABLE TO HAVE AN UNDERSTANDING OR SOME IDEA ON WHY I MIGHT BE THINKING OR FEELING THAT WAY COMPARED TO JUST HAVING THERAPY W/ SOMEONE WHO JUST LISTENS & WRITES THINGS DOWN, W/OUT GIVING SOME KIND OF IDEA OR INSIGHT
YES	YES	NO
YES	YES	COST
MOST, THERE WERE SOME THAT WERE NOT CLEAR OR DID NOT FOCUS ENOUGH	YES	NO
YES	YES	NO
INSTRUCTIONS COULD BE CLEARER	FOR THE MOST PART	NO, DON'T WANT TO TAKE THERAPY
FOR THE MOST PART, SOME QUESTIONS DID NOT APPEAR TO ACHIEVE A GOAL	YES	NO
YES	YES	NO
MOST WERE CLEAR, BUT SOME WERE QUESTIONABLE SUCH AS THE 4-14 SESSIONS	YES	NO
YES	YES	NO
YES	YES	NO
YES	FOR THE MOST PART, I WOULD HAVE DIFFERENT REACTIONS TO DIFFERENT CIRCUMSTANCES	WHAT TYPE OF MEDICATION TO TAKE
YES	YES	NO
YES	YES	NO

YES!	YES!	METHOD USED TO APPROACH MY SITUATION, THOUGHTS & FEELINGS
VERY	YES	NO
YES	YES	A THERAPIST W/ A GOOD REPUTATION
SOME OF THEM WERE DIFFICULTY	MOST OF THEM	NO
YES	YES	NO
YES	YES	NO
YES	YES	MAINLY IT IS BASED ON IF YOU CAN TRUST THEM. I'D ALSO LIKE TO SEE THEM BE AGGRESSIVE AS FAR AS FINDING SOLUTIONS
NO, SOMETIMES TOO GENERAL, REFER TO QUEST. 2	I TOOK THE QUESTION AT VALUE. (I.E., HAVING 4-14 SESSIONS. IS THAT IN A WEEK PERIOD, A MONTH, OR A YEAR'S TIME)?	TAKE AWAY QUESTIONS ON WHAT I WOULD DO. SORRY, BUT I DON'T KNOW WHAT I WOULD DO. DEPENDS ON WHAT I AM SEEKING THERAPIST FOR, AND TO WHAT EXTENT THE TRAUMA HAD/WAS TAKEN PLACE. AND HOW WELL THE THERAPIST WORKS
YES	YES	THERAPIST WOULD NEED TO LISTEN TO ANY OBJECTIONS I MAY HAVE REGARDING HIS OR HER THOUGHTS
YES	YES	NO
NOT REALLY	YES	NO
YES FOR THE MOST PART	YES YES	NO CAN'T THINK OF ANY
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO



YES	YES	NO
YES	YES	NO
YES	YES	NO
YES, EXCEPT #1. I DON'T COMPLETELY UNDERSTAND WHAT WAS BEING ASKED	YES	HOW OTHERS AFFECT MY THOUGHTS & FEELINGS IN HOW THEY ACT & SAY
MOST WERE, I DIDN'T UNDERSTAND THE QUESTION THAT SAID BETWEEN 4-14 SESSIONS	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES	YES	NO
YES, VERY DIRECT	YES	NO
I WASN'T EXACTLY SURE HOW OT ANSWER SOME OF THE QUESTIONS B/C I WASN'T SURE WHAT IT WAS REFERRING TO	PRETTY MUCH	NO
YES	YES	CHANGES IN LIFESTYLE
YES	YES	NO
SORT OF, SOME WERE SOMEWHAT VAGUE	YES	YES
YES	YES	NO
SOMEWHAT	TO A CERTAIN EXTENT	NO
YES	YES	NO

YES

YES

NO

SOME OF THEM WERE  
UNCLEAR

MOST OF THEM

PERSONALITY OF THERAPIST

YES

YES

AGE OF THERAPIST. I WOULD  
WANT SOMEONE YOUNG ENOUGH  
FOR ME TO IDENTIFY WITH

YES

YES

NO

YES

YES, ALTHOUGH I HAVE  
NEVER SOUGHT THERAPY  
SO THESE THOUGHTS ARE  
NEW TO ME

NO

SOMEWHAT CLEAR. SOME  
OF THEM HAVE SOME  
RANGE IN THE THOUGHT OF  
THE ANSWER.

YES

NO

YES

YES

NO



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